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Dr. Arindam Mukherjee, IIM-Ranchi. Area - Information Systems

LEARNING

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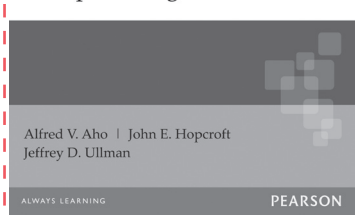
Contents

The Design and Analysis of Computer Algorithms



The Design and Analysis of Computer Algorithms

Alfred V. Aho • John E. Hopcroft • Jeffrey D. Ullman

ISBN: 9788131702055 | © Year: 2002 | Pages: 480

About the Book

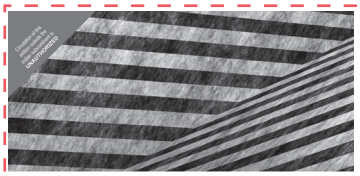
The Design and Analysis of Computer Algorithms introduces the basic data structures and programming techniques often used in efficient algorithms. It covers the use of lists, push-down stacks, queues, trees, and graphs. With this text, you gain an understanding of the fundamental concepts of algorithms, the very heart of computer science. It introduces the basic data structures and programming techniques often used in efficient algorithms. Covers use of lists, push-down stacks, queues, trees, and graphs. Later chapters go into sorting, searching and graphing algorithms, the string-matching algorithms, and the Schonhage-Strassen integer-multiplication algorithm. Provides numerous graded exercises at the end of each chapter.

Contents

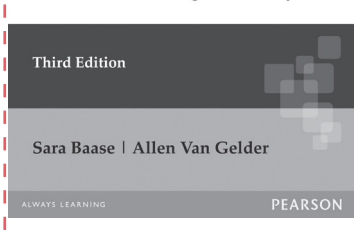
About the Authors

Alfred V. Aho is head of the Computing Principles Research Department at AT&T Bell Laboratories in Murray Hill, New Hersey.

Jeffrey D. Ullman is currently Professor of Computer Science at Stanford University.



Computer Algorithms
Introduction to Design and Analysis



Computer Algorithms: Introduction to Design and Analysis, 3/e

Sara Baase • Allen Van Gelder

ISBN: 9788131702444 | © Year: 2002 | Pages: 708

About the Book

Drawing upon combined decades experience, Professors Sara Baasse and Allen Van Gelder have extensively revised this best seller on algorithm design and analysis to make it the most current and accessible book available. This edition features an increased emphasis on algorithm design techniques such as divide-and-conquer and greedy algorithms, along with the addition of new topics and exercises. It continues the tradition of solid mathematical analysis and clear writing style that made this book so popular in previous editions.

Features

- Emphasizes the development of algorithms through a step-by-step process rather than by merely presenting the end result.
- Stresses the importance of the algorithm analysis process—continuously re-evaluating, modifying and perhaps rejecting algorithms until a satisfactory solution is attained.

- Provides extensive treatment of recursion with a clear, student-friendly review of how it works and why it is a valuable programming technique.
- Uses a Java-like pseudo code; includes an appendix with Java examples.

Features

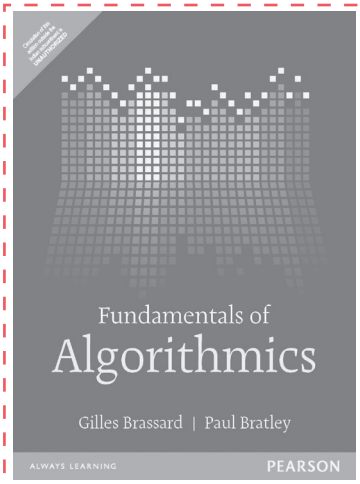
- Material on accelerated version of Heapsort, section on computing with DNA, chapter on Dynamic Sets.
- Expanded treatment of recursion with a clear, student-friendly review of how it works, and why it is a valuable programming technique.
- Expanded mathematical background emphasizes practical techniques, including solutions to recurrence equations.
- Review of abstract data types, with Java class definitions for several commonly used ADTs such as list, tree, stack, and priority queue.
- Pseudocode updated from Pascal-like to Java-like; includes an appendix with Java examples.
- More than 100 new exercises.

Contents

About the Authors

Sara Baase is a Professor of Computer Science at San Diego State University and has been teaching CS for 25 years. Dr. Baase is a three-time recipient of the San Diego State University Alumni Association's Outstanding Faculty Award, and she has written a number of text books in the areas of algorithms, assembly language, and social and ethical issues related to computing. She earned her doctorate at the University of California, Berkeley.

Allen Van Gelder is a Professor of Computer Science at the University of California at Santa Cruz,where he has been teaching CS for 12 years. He received his Ph.D. in Computer Science at Stanford University and is a past recipient of the Presidential Young Investigator Award.



Fundamentals of Algorithmics

Gilles Brassard • Paul Bratley

ISBN: 9789332549999 | © Year: 2015 | Pages: 524

About the Book

This is an introductory-level algorithm text. It includes worked-out examples and detailed proofs. Presents Algorithms by type rather than application.

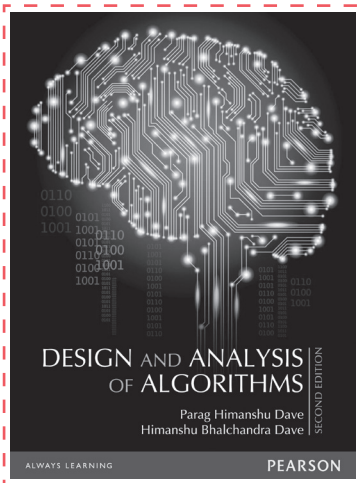
Features

- Structures material by techniques employed, not by the application area, so students can progress from the underlying abstract concepts to the concrete application essentials.
- Begins with a compact, but complete introduction to some necessary math, and also includes a long introduction to proofs by contradiction and mathematical induction. This serves to fill the gaps that many undergraduates have in their mathematical knowledge.
- Gives a paced, thorough introduction to the analysis of algorithms, and uses coherent notation and unusually detailed treatment of solving recurrences.

- includes a chapter on probabilistic algorithms, and an introduction to parallel algorithms, both of which are becoming increasingly important.
- approaches the analysis and design of algorithms by type rather than by application.

Contents

1. Preliminaries
2. Elementary Algorithmicss
3. Asymptotic Notation
4. Analysis of Algorithms
5. Some Data Structures
6. Greedy Algorithms
7. Divide-And-Conquer
8. Dynamic Programming
9. Exploring Graphs
10. Probabilistic Algorithms
11. Parallel Algorithms
12. Computational Complexity
13. Heuristic and Approximate Algorithms



Design and Analysis of Algorithms, 2/e

Parag H. Dave • Himanshu B. Dave

New Edition

ISBN: 9788131799437 | © Year: 2013 | Pages: 1112

About the Book

The revised 2nd edition has been updated with topics on branch and bound, backtracking and greedy method. All aspects of algorithm design and analysis have been discussed in 22 chapters which are divided into two parts. The first part chapters, explains the problem-solving techniques, algorithm design and data structures. The second part explains the concepts of algorithm analysis.

Features

- The basic concepts such as problem solving, statements, functions and loops are covered in detail.
- Includes design issues, computation models and proof rules.
- A total of 218 examples/algorithms.
- A total of 350 exercises.

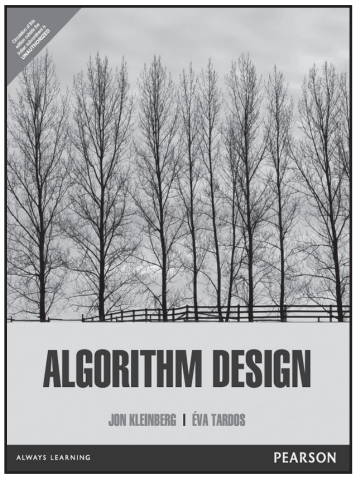
Contents

1. Introduction
2. Problem Solving with a Computer
3. Top-Down Design
4. Iterative Algorithm Design Issues
5. Computation Models and Design by Refinement
6. Proof Rules—Basics
7. Design by Proof Rules
8. Design using Recursion
9. Abstract Algorithms 1—Divide-and Conquer
10. Abstract Algorithms 2—Greedy Methods
11. Abstract Algorithms 3—Dynamic Programming
12. Abstract Algorithms 4—Backtracking
13. Natural Algorithms—GA, SA, ANN, TS
14. Efficiency of Algorithms
15. Examples of Complexity Calculation
16. Time-Space Trade-Off
17. Tractable and Non-Tractable Problems
18. Some NP and NP-Complete Problems
19. Randomized and Approximate Algorithms
20. Formal Specifications—1 Model Oriented
21. Formal Specifications—2 Algebraic

About the Authors

Dr. Parag H. Dave, Senior Lecturer in Computer Engineering of Dharmsinh Desai University, Gujarat.

Himanshu B. Dave, Ex-Professor and Head of Department in Department of Computer Engineering of Dharmsinh Desai University, Gujarat.



Algorithm Design

Jon Kleinberg • Éva Tardos

ISBN: 9789332518643 | © Year: 2013 | Pages: 827

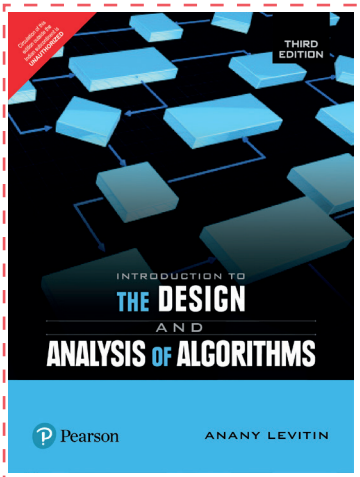
About the Book

Algorithm Design introduces algorithms by looking at the real-world problems that motivate them. The book teaches students a range of design and analysis techniques for problems that arise in computing applications. The text encourages an understanding of the algorithm design process and an appreciation of the role of algorithms in the broader field of computer science.

Features

- Focus on problem analysis and design techniques.
- Discussion is grounded in concrete problems and examples rather than abstract presentation of principles, with representative problems woven throughout the text.
- Over 200 well crafted problems with several coming from companies such as Yahoo!® and Oracle®.
- Each problem has been class tested for usefulness and accuracy in the authors' own undergraduate algorithms courses.
- Broad coverage of algorithms for dealing with NP-hard problems and the application of randomization, increasingly important topics in algorithms

Contents



Introduction to the Design and Analysis of Algorithms, 3/e

Anany Levitin

New Edition

ISBN: 9789332583771 | © Year: 2017 | Pages: 592

About the Book

Based on a new classification of algorithm design techniques and a clear delineation of analysis methods, **Introduction to the Design and Analysis of Algorithms** presents the subject in a coherent and innovative manner. Written in a student-friendly style, the book emphasizes the understanding of ideas over excessively formal treatment while thoroughly covering the material required in an introductory algorithms course. Popular puzzles are used to motivate students' interest and strengthen their skills in algorithmic problem solving. Other learning-enhancement features include chapter summaries, hints to the exercises, and a detailed solution manual.

Features

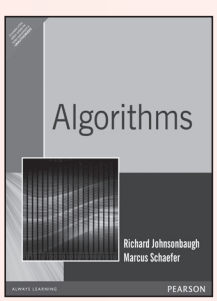
- Employs an innovative and more comprehensive taxonomy of algorithm design techniques.
- Covers mathematical analysis of both nonrecursive and recursive algorithms, as well as empirical analysis and algorithm visualization.
- Discusses limitations of algorithms and ways to overcome them.
- Treats algorithms as problem-solving tools and develops algorithmic thinking by using puzzles and games.
- Contains over 600 exercises with hints for students and detailed solutions for instructors.
- New exercises and engaging puzzles.

Contents

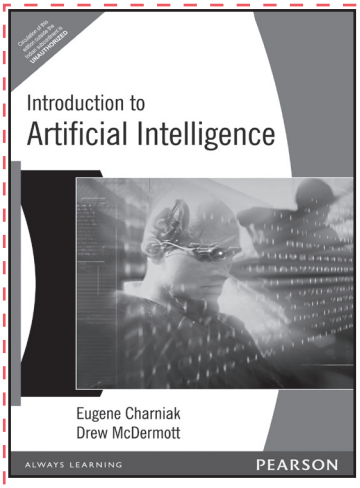
About the Author

Anany Levitin, Villanova University.

Also Available



ISBN: 9788131708682
Pages: 766

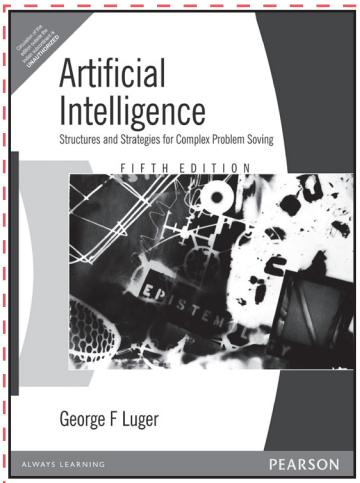


Introduction to Artificial Intelligence

Eugene Charniak • Drew McDermott

ISBN: 9788131703069 | © Year: 2002 | Pages: 720

Contents



Artificial Intelligence: Structures and Strategies for Complex Problem Solving, 5/e

George F. Luger

ISBN: 9788131723272 | © Year: 2008 | Pages: 928

About the Book

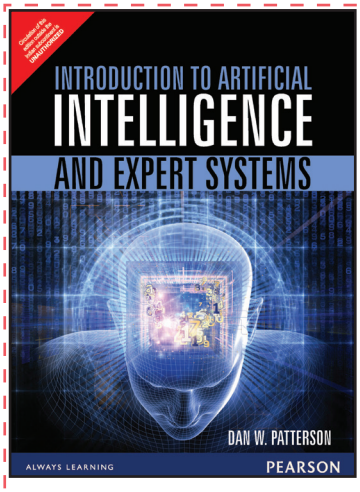
Much has changed since the early editions of Artificial Intelligence were published. To reflect this the introductory material of this fifth edition has been substantially revised and rewritten to capture the excitement of the latest developments in AI work.

Artificial intelligence is a diverse field. To ask the question "what is intelligence?" is to invite as many answers as there are approaches to the subject of artificial intelligence. These could be intelligent agents, logical reasoning, neural networks, expert systems, evolutionary computing and so on. This fifth edition covers all the main strategies used for creating computer systems that will behave in "intelligent" ways. It combines the broadest approach of any text in the marketplace with the practical information necessary to implement the strategies discussed, showing how to do this through Prolog or LISP programming.

Features

- A thorough and balanced treatment of the foundations of AI.
- Contains a combination of theoretical foundations of intelligent problem solving with the data structures and algorithms needed for implementation.
- Example programs written in LISP and PROLOG.
- Puts practical applications of AI into context.
- A unique discussion of the social and philosophical issues of AI.
- Model-based reasoning and planning examples from the NASA space program. Comments on the AI endeavor from the perspectives of philosophy, psychology and neuro-physiology.

Contents



Introduction to Artificial Intelligence and Expert Systems

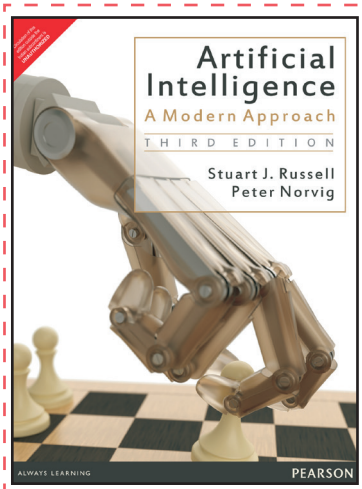
Dan W. Patterson

ISBN: 9789332551947 | © Year: 2015 | Pages: 464

About the Book

Dan W. Patterson's Introduction to Artificial Intelligence and Expert Systems, is a comprehensive book for Computer Science graduation and post-graduation students. It comprises of various concepts of knowledge-system approach and stresses on the relevant use of its knowledge in particular expert systems. The book discusses topics such as Introduction and Overview of Artificial Intelligence; Knowledge Representation and Formalized Symbolic Logics; Knowledge Organization and Manipulation and Search and Control Strategies; Perception, Communication and Expert Systems and Natural Language Processing; and Knowledge Acquisition and General Concepts in Knowledge Acquisition.

Contents



Artificial Intelligence: A Modern Approach, 3/e

Stuart Russell • Peter Norvig

New Edition

ISBN: 9789332543515 | © Year: 2015 | Pages: 1168

About the Book

This edition captures the changes that have taken place in the field of artificial intelligence (AI) since the last edition in 2003.

There have been important applications of AI technology, such as the widespread deployment of practical speech recognition, machine translation, autonomous vehicles, and household robotics. There have been algorithmic landmarks, such as the solution of the game of checkers. There has also been a great deal of theoretical progress, particularly in areas such as probabilistic reasoning, machine learning, and computer vision.

Features

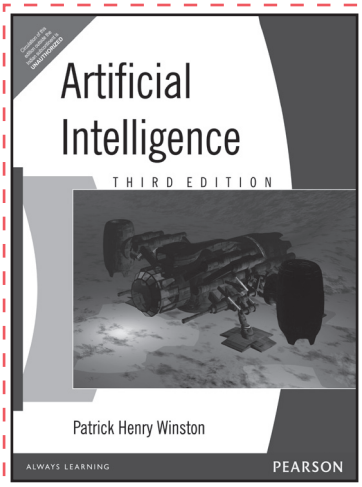
- Nontechnical learning material provides a simple overview of major concepts.
- Expanded coverage of topics such as constraint satisfaction, local search planning methods, multi-agent systems, game theory, statistical natural language processing and uncertain reasoning over time.
- More detailed descriptions of algorithms for probabilistic inference, fast propositional inference, probabilistic learning approaches including EM, and other topics.
- Updated and expanded exercises .
- A unified, agent-based approach to AI — Organizes the material around the task of building intelligent agents.
- Comprehensive, up-to-date coverage — Includes a unified view of the field organized around the rational decision making paradigm.
- In-depth coverage of basic and advanced topics which provides students with a basic understanding of the frontiers of AI without compromising complexity and depth.
- Pseudo-code versions of the major AI algorithms are presented in a uniform fashion, and Actual Common Lisp and Python implementations of the presented algorithms are available via the Internet.

Contents

About the Author

Stuart Russell is a Fellow and former Executive Council member of the American Association for Artificial Intelligence. He has published over 100 papers on a wide range of topics in artificial intelligence.

Peter Norvig is currently Director of Research at Google, Inc., and was the director responsible for the core Web search algorithms from 2002 to 2005. He is a Fellow of the American Association for Artificial Intelligence and the Association for Computing Machinery.



Artificial Intelligence, 3/e

Patrick Henry Winston

ISBN: 9788131715055 | © Year: 1992 | Pages: 764

About the Book

This book explains how it is possible for computers to reason and perceive, thus introducing the field called artificial intelligence. This book would appeal to programmers, professionals and students. This completely rewritten and updated edition reflects the revolutionary progress made since the previous edition was published.

Features

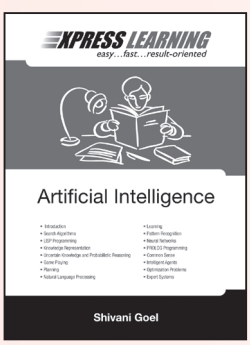
- Semiformal representation and procedure specifications bring the ideas to within a step or two implementation and highlight unifying themes.
- Application examples provide a glimpse of the ideas at work in real-world systems.
- Powerful ideas and principles are identified ad emphasized.

Contents

About the Author

Patrick Henry Winston is Director of the Artificial Intelligence Laboratory at the Massachusetts Institute of Technology, and a past resident of the American Association for Artificial Intelligence. He is co-author of a related book, Lisp, which introduces the LISP programming language.

Also Available



ISBN: 9788131787472
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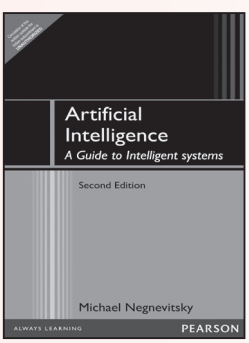

ISBN: 9788131720493
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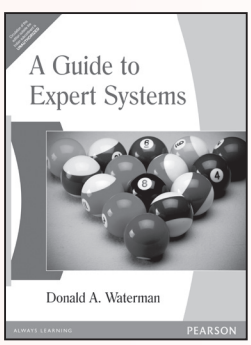
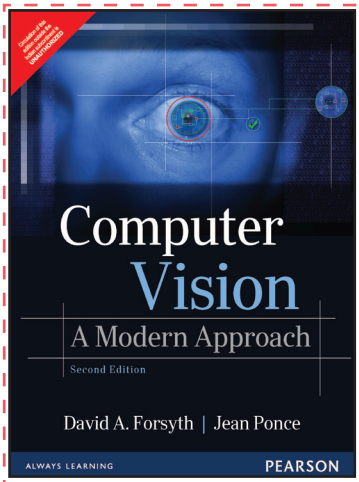


ISBN: 9788131713310



Computer Vision: A Modern Approach, 2/e

NEW

David A. Forsyth • Jean Ponce

ISBN: 9789332550117 | © Year: 2015 | Pages: 792

About the Book

This textbook provides the most complete treatment of modern computer vision methods by two of the leading authorities in the field. This accessible presentation gives both a general view of the entire computer vision enterprise and also offers sufficient detail for students to be able to build useful applications. Students will learn techniques that have proven to be useful by first-hand experience and a wide range of mathematical methods.

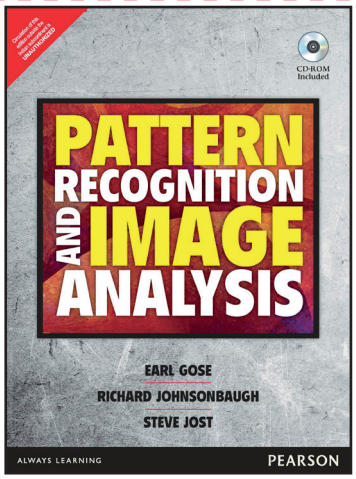
Features

- Broad coverage—Coverage of a wide range of topics allows customization to fit instructor, student, and course needs.
- Most comprehensive and up-to-date text on computer vision—Includes essential topics that either reflect practical significance or are of theoretical importance.
- Depth of the material accessible to various levels of students—Topics are discussed in substantial and increasing depth.
- Application surveys—Describe numerous important application areas such as image based rendering and digital libraries.
- Many important algorithms broken down and illustrated in pseudo code.
- Excellent pedagogy throughout the text—Includes numerous worked examples, exercises, programming assignments, and extensive illustrations.

Contents

About the Author

David A. Forsyth, University of Illinois at Urbana-Champaign.
Jean Ponce, Ecole Normale Superieure, Paris.



Pattern Recognition and Image Analysis

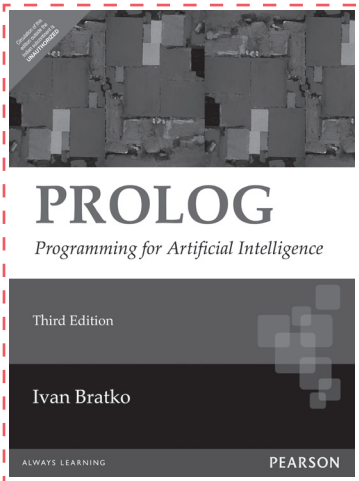
NEW

Earl Gose • Richard Johnsonbaugh • Steve Jost

ISBN: 9789332549791 | © Year: 2015 | Pages: 496

About the Book

Over the past 20 to 25 years, pattern recognition has become an important part of image processing applications where the input data is an image. This book is a complete introduction to pattern recognition and its increasing role in image processing. It covers the traditional issues of pattern recognition and also introduces two of the fastest growing areas: Image Processing and Artificial Neural Networks. Examples and digital images illustrate the techniques, while an appendix describes pattern recognition using the SAS statistical software system.



PROLOG: Programming for Artificial Intelligence, 3/e

Ivan Bratko

ISBN: 9788131711347 | © Year: 2002 | Pages: 704

About the Book

The third edition of this best-selling guide to Prolog and Artificial Intelligence has been updated to include key developments in the field while retaining its lucid approach to these topics. Prolog has its roots in logic, however the main aim of this book is to teach Prolog as a practical programming tool. This text therefore concentrates on the art of using the basic mechanisms of Prolog to solve interesting problems.

Features

- Combined approach to Prolog and AI allows flexibility for learning and teaching.
- Provides a thorough representation of AI, emphasizing practical techniques and Prolog implementations.
- Prolog programs for use in projects and research are available for download on the World Wide Web.

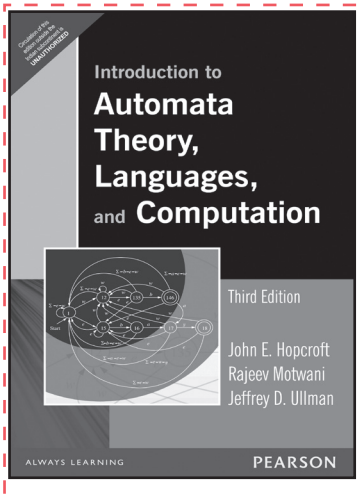
New and/or revised in this edition

- Constraint Logic Programming
- Qualitative Reasoning
- Inductive Logic Programming
- The addition of belief networks for handling uncertainty.
- A major update on machine learning.
- Additional techniques for improving Program efficiency.
- Meta-programming is updated to show how Prolog can be used to implement other languages (including object-oriented programming).
- A new Companion Web site will contain further teaching materials and updates.

Contents

About the Author

Professor Ivan Bratko leads the AI groups in the Faculty of Computer and Information Science at both Ljubljana University and the Jozef Stefan Institute in Slovenia.



Introduction to Automata Theory, Languages, and Computation, 3/e

John E. Hopcroft • Rajeev Motwani • Jeffrey D. Ullman

ISBN: 9788131720479 | © Year: 2008 | Pages: 554

About the Book

This classic book on formal languages, automata theory, and computational complexity has been updated to present theoretical concepts in a concise and straightforward manner with the increase of hands-on, practical applications. This new edition comes with Gradiance, an online assessment tool developed for computer science.

Gradiance is the most advanced online assessment tool developed for the computer science discipline. With its innovative underlying technology, Gradiance turns basic homework assignments and programming labs into an interactive learning experience for students. By using a series of "root questions" and hints, it not only tests a student's capability, but actually simulates a one-on-one teacher-student tutorial that allows for the student to more easily learn the material. Through the programming labs, instructors are capable of testing, tracking, and honing their students' skills, both in terms of syntax and semantics, with an unprecedented level of assessment never before offered.

Features

- Presents theoretical concepts in a concise and accessible style.
- Emphasizes modern applications of the theory.
- Uses numerous figures to help convey ideas.
- Provides more detail and intuition for definitions and proofs.
- Challenges readers with extensive exercises at various levels of difficulty at the end of each chapter.
- Includes additional practice and tests comprehension of important concepts with Gradiance an online homework and tutorial system.

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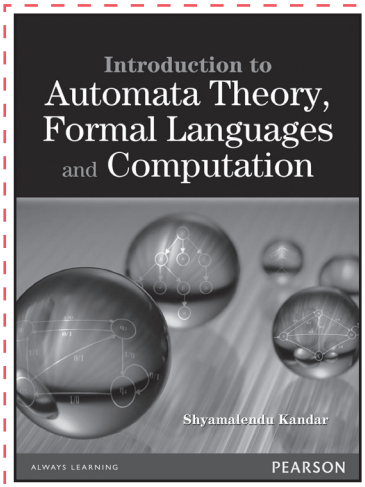


Introduction to Automata Theory, Formal Languages and Computation

Shyamalendu Kandar

ISBN: 9788131793510 | © Year: 2013 | Pages: 656

About the Book

Formal languages and automata theory is the study of abstract machines and how these can be used for solving problems. The book has a simplistic approach to topics like automata theory, formal languages and theory of computation and explains them exhaustively. The difficult topics are described in a step-wise manner, which makes it easy for the students to comprehend them. These descriptions are followed by numerous relevant examples related to the topic. A brief introductory chapter on compilers explaining its relation to theory of computation is also given.

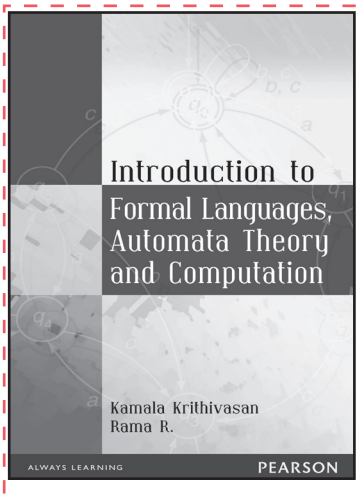
Features

- Exhaustive coverage on finite automata covering topics like Mealy and Moore machines, interconversion, two-way finite automata, application and limitation of finite automata.
- Detailed and in-depth discussion on Turing machine and its variations.
- Over 15 years of GATE question papers discussed in the book.
- Discussion of previous years' questions (related to the subject) that appeared in different university examinations.
- Excellent and exhaustive pedagogy:
  - 500+ figures
  - 500+ solved examples
  - 277+ objective-type questions with answers
  - 135+ unsolved questions
- Summary at the end of each chapter for fast recapitulation of concepts.

Contents

About the Author

Shyamalendu Kandar is currently working as Assistant Professor of computer science and engineering at Haldia Institute of Technology, Haldia, West Bengal. He acted as a Coordinator of HIT centre for the course M.Tech (IT) distance mode conducted by Jadavpur University. He teaches subjects like formal language & automata theory, compiler design, analysis of algorithms, web technology, and object oriented programming. He has a number of research papers in different national & international conferences/ journals of repute. His research interests are secret sharing, visual cryptography, etc.



Introduction to Formal Languages, Automata Theory and Computation

Kamala Krithivasan • Rama R.

ISBN: 9788131723562 | © Year: 2009 | Pages: 436

About the Book

Introduction to Formal Languages, Automata Theory and Computation presents the theoretical concepts in a concise and clear manner, with an in-depth coverage of formal grammar and basic automata types. The book also examines the underlying theory and principles of computation and is highly suitable to the undergraduate courses in computer science and information technology. An overview of the recent trends in the field and applications are introduced at the appropriate places to stimulate the interest of active learners.

Features

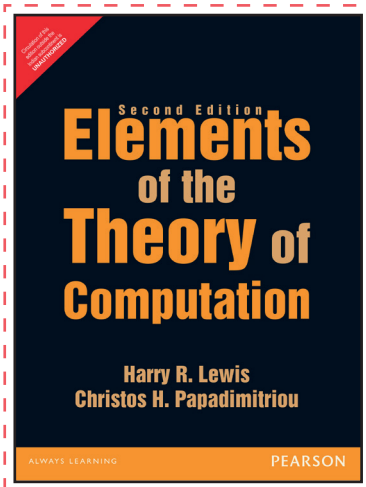
- Numerous worked-out examples and problems to facilitate easier recapitulation of the concepts learnt.
- Exhaustive coverage of computability and decidability through Turing machines.
- Advanced topics on formal languages and new models of computation for the benefit of the students contemplating an in-depth research.
- Multiple-choice questions designed in a way to help students understand the basics.

Contents

About the Authors

Kamala Krithivasan received her Ph.D. from the University of Madras,and she joined the Indian Institute of Technology Madras (IITM) in 1975. With more than 30 years of teaching and research experience at IITM, she is currently Professor at the Department of Computer Science and Engineering,in which she served as Chairperson during 1992–1995. Her research interests include formal language theory and unconventional models of computing like DNA computing, membrane computing and discrete tomography. A recipient of the Fulbright fellowship in 1986, Professor Kamala is also a fellow of the Indian National Academy of Engineering.

Rama R. was awarded a doctoral degree by Anna University in 1989. She taught in the College of Engineering, Anna University, before joining the Department of Mathematics, Indian Institute of Technology Madras (IITM), as Assistant Professor in 1996. She was subsequently elevated as Professor in 2006 and has been in that position ever since. Professor Rama has 20 years of teaching and research experience, and has guided four research students in their PhD theses. Her domain of interest is in the area of formal languages and automata, and natural computing. She is also a life member of the Indian Society for Technical Education.



Elements of the Theory of Computation, 2/e

Harry Lewis

ISBN: 9789332549890 | © Year: 2015 | Pages: 480

About the Book

This is the long awaited Second Edition of Lewis and Papadimitriou's best-selling theory of computation text. In this substantially modified edition, the authors have enhanced the clarity of their presentation by making the material more accessible to a broader undergraduate audience with no special mathematical experience.

Features

- Offers a mathematically sound introduction to the classical and contemporary theory of computation, and provide deep insights into the fundamental paradigms of computer science.
- Would you like a theory of computation text that provides a solid, specialized introduction to algorithms?
- Informally introduces algorithms, complexity analysis, and algorithmic ideas in Ch. 1 (in connection to transitive and other closures), and explores them throughout the book.
- Introduces asymptotic analysis and O- notation.
- Features a more "student-friendly" approach.
- Truncates long proofs and presents them as exercises.
- Provides problems after each section to check student comprehension.
- Considers automata in the context of their applications.
- Includes extensive discussion of state minimization, the Myhill-Nerode Theorem, string matching, and parsing.
- Complexity starts with a proof that P = EXP.

- Many combinatorial problems are introduced and analyzed (including variants of satisfiability), and their apparent complexity contrasted.
- Would you like to teach NP—completeness, as well as ways of coping with it, in your course?
- Features a separate chapter on NP-completeness.
- Extensive section on coping with NP - completeness that covers special cases, approximation algorithms, backtracking, and local search heuristics.
- Covers NP - completeness including state minimization problem of nondeterministic finite automata.
- Logic coverage has been limited to propositional logic in relation to NP - completeness.
- Considers Cook's Theorem again via the tiling problem.
- Discusses approximation and its complexity.
- Introduces the Turing machine notation more informally.
- Uses the terms recursive and recursively innumerably.
- Quantitatively analyzes simulations between machine models.
- Introduces and analyzes a model of random access Turing machines, similar to RAMs.
- Offers a more succinct treatment of general grammars and ...¿¿-recursive functions.
- Uses random access Turing machines to bridge the "credibility gap" between Turing machine model and the empirical concept of an algorithm.
- Includes some recursion theory (up to Rice's theorem).
- Provides an informal, concise development of A-recursive functions.
- Explores Chomsky normal form and the resulting dynamic programming algorithm.

Contents

Languages and Machines: An Introduction to the Theory of Computer Science, 3/e

Thomas A. Sudkamp

ISBN: 9788131714751 | © Year: 2007 | Pages: 672

About the Book

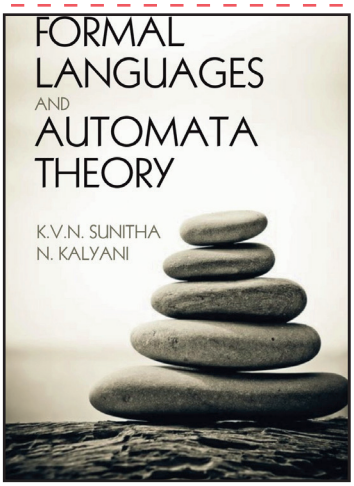
The third edition of Languages and Machines: An Introduction to the Theory of Computer Science provides readers with a mathematically sound presentation of the theory of computer science at a level suitable for junior and senior level computer science majors. The theoretical concepts and associated mathematics are made accessible by a "learn as you go" approach that develops an intuitive understanding of the concepts through numerous examples and illustrations. In this edition the presentation has been enhanced by increasing the number of examples, expanding the selection of topics particularly in the area of computational complexity, and providing a flexible format giving instructors the ability to design their courses that concentrate on specific areas such as automata theory, computability theory, or computational complexity.

Features

- Expansion coverage of computational complexity.
- Over 100 new examples and exercises. Examples of programming syntax are given using the BNF description of the programming language Java.
- A new chapter following the definition of NP-completenss and Cook's Theorem presents strategies for demonstrating that a problem is NP-complete.
- Increased coverage of space complexity including Savitch's Theorem and P-space completeness.
- Organized to provide flexibility to design courses that concentrate in specific areas such as automata theory, computability theory, or computational complexity.
- Topics covered with greater emphasis include the use of diagonalization and self-reference in proofs by

contradiction, the application of regular expressions in text searching using grep as an example, the CYK parsing algorithm, the motivation for and interpretation of nondeterministic computation, the role of the problem representation in the assessment of computational complexity, and the significance of problem reduction in decidability and undecidability.

Contents



Formal Languages and Automata Theory

K.V.N. Sunitha • N. Kalyani

ISBN: 9789332537286 | © Year: 2015 | Pages: 480

About the Book

Formal Languages and Automata Theory deals with the mathematical abstraction model of computation and its relation to formal languages. This book is intended to expose students to the theoretical development of computer science. It also provides conceptual tools that practitioners use in computer engineering. An assortment of problems illustrative of each method is solved in all possible ways for the benefit of students. The book also presents challenging exercises designed to hone the analytical skills of students.

Features

- Probes the concepts methodically with an extensive use of definitions, proofs, solved examples, exercises and applications of the models.
- Includes a summary, additional (progressively challenging) problems, multiple-choice and fill-in-the-blanks questions for each chapter.
- Examines the importance of Turing machines as language recognizers, language generators and as computing models.
- Explores regular languages, covering the mechanisms for representing languages, the closure properties of such languages, the existence of other languages and other structural properties.
- Includes frequently asked university questions.

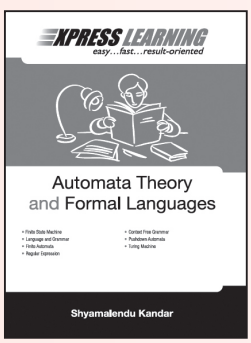
Contents

About the Authors

Dr K. V. N. Sunitha, Principal, BVRIT Hyderabad College of Engineering for Women, Nizampet, Hyderabad, obtained her B.Tech in ECE from Nagarjuna University and M.Tech in Computer Science from REC Warangal. She is a JNTUH ratified professor with 23 years of teaching experience. She received ';Academic Excellence Award' from the management of G. Narayanamma Institute of Technology & Science in 2005.

Dr N. Kalyani obtained B.Tech in Civil from Osmania University in 1994, M.Tech in Computer Science from JNTUH in 2001 and Ph.D. from JNTUH in 2012. She has working experience of 5 years as Design Engineer in R. K. Engineers, Hyderabad and 14 years of teaching for both UG and PG students.

Also Available



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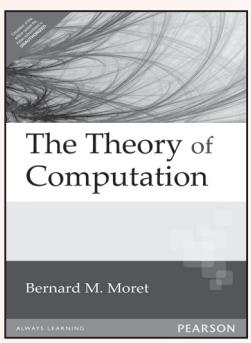

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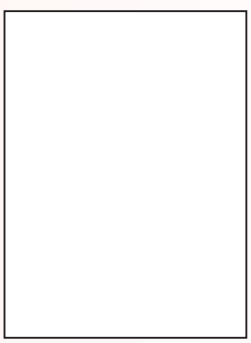

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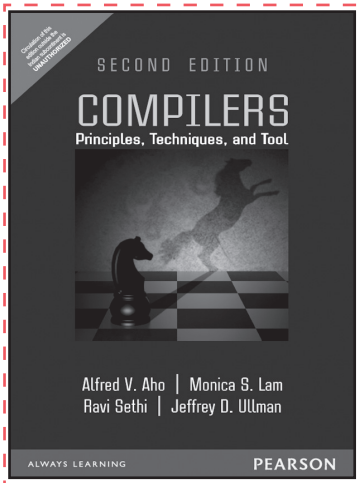


Compilers: Principles, Techniques, and Tool, 2/e

Alfred V. Aho • Monica S. Lam • Ravi Sethi • Jeffrey D. Ullman

ISBN: 9789332518667 | © Year: 2013 | Pages: 966

About the Book

Compilers: Principles, Techniques and Tools, known to professors, students, and developers worldwide as the "Dragon Book," is available in a new edition. Every chapter has been completely revised to reflect developments in software engineering, programming languages, and computer architecture that have occurred since 1986, when the last edition published. The authors, recognizing that few readers will ever go on to construct a compiler, retain their focus on the broader set of problems faced in software design and software development.

Features

- Introduces the theory and practice of compiler design.
- Covers topics like context-free grammars, fine state machines, and syntax-directed translation.

Contents

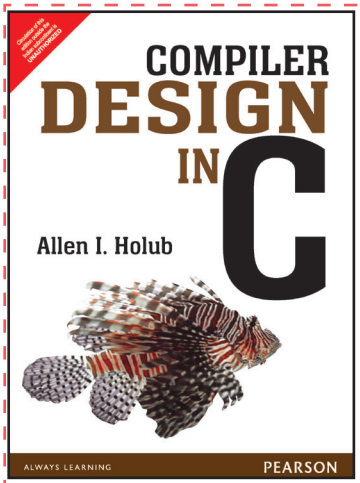
About the Authors

Alfred V. Aho is Lawrence Gussman Professor of Computer Science at Columbia University. Professor Aho has won several awards including the Great Teacher Award for 2003 from the Society of Columbia Graduates and the IEEE John von Neumann Medal. He is a member of the National Academy of Engineering and a fellow of the ACM and IEEE.

Monica S. Lam is a Professor of Computer Science at Stanford University, was the Chief Scientist at Tensilica and the founding CEO of moka5. She led the SUIF project which produced one of the most popular research compilers, and pioneered numerous compiler techniques used in industry.

Ravi Sethi launched the research organization in Avaya and is president of Avaya Labs. Previously, he was a senior vice president at Bell Labs in Murray Hill and chief technical officer for communications software at Lucent Technologies. He has held teaching positions at the Pennsylvania State University and the University of Arizona, and has taught at Princeton University and Rutgers. He is a fellow of the ACM.

Jeffrey D. Ullman is CEO of Gradiance and a Stanford W. Ascherman Professor of Computer Science at Stanford University. His research interests include database theory, database integration, data mining, and education using the information infrastructure. He is a member of the National Academy of Engineering, a fellow of the ACM, and winner of the Karlstrom Award and Knuth Prize.



Compiler Design in C

Allen I. Holub

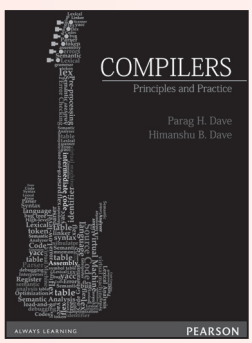
ISBN: 9789332549500 | © Year: 2015 | Pages: 768

About the Book

This book is highly accessible to both computer science students and programmers. The approach is similar to that taken by Tanenbaum for operating systems in the C-language code that implements all algorithms.

Contents

Also Available



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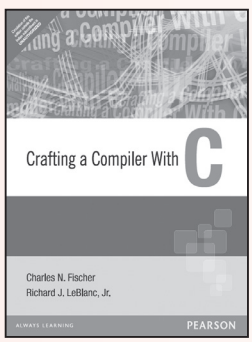

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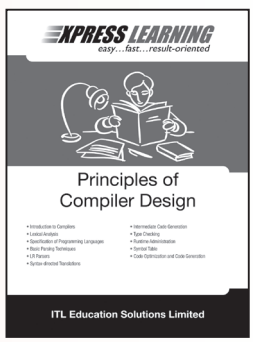

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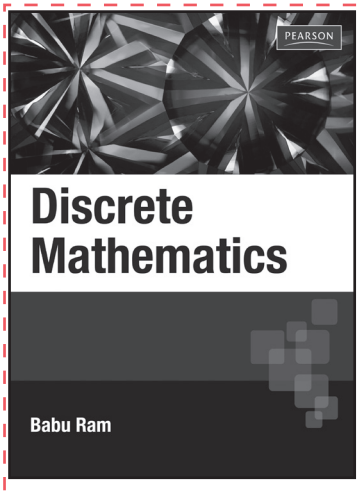


Discrete Mathematics

Babu Ram

ISBN: 9788131733103 | © Year: 2010 | Pages: 584

About the Book

Discrete Mathematics is an integral part of any undergraduate as well as post graduate courses in Computer Science and Mathematics. The syllabi of all these courses have been studied in depth and utmost care has been taken to ensure that all the essential topics in discrete structures are adequately emphasized. The book will enable the students to develop the requisite computational skills needed in software engineering.

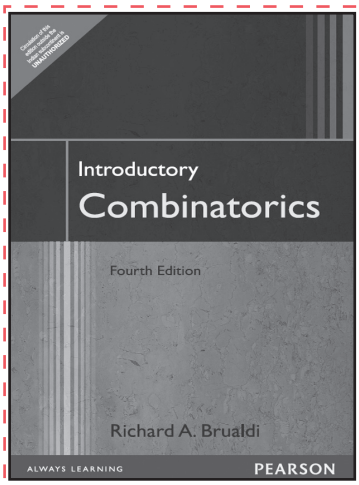
Features

- C Programs of important algorithms .
- Extensive coverage of Boolean Algebra, Algebraic Structures and Graph Theory.
- 550 Solved examples and 170 practice problems with hints/answers.

Contents

About the Author

Babu Ram received his Ph.D. degree in mathematics in 1973 from Kurukshetra University, Kurukshetra, India. He was formerly Professor of Mathematics and Dean, Faculty of Physical Sciences at Maharshi Dayanand University, Rohtak and has been teaching mathematics for the past 36 years. A member of Indian Mathematical Society and the American Mathematical Society, Professor Babu Ram has published 42 research papers in Real and Functional Analysis in international journals of repute. He is on the board of reviewers of both American Mathematical Reviews and Zentralblatt fur Mathematik und ihre Grengebiete, Berlin. Presently, he is working as Director MCA at Manav Rachna International University, Faridabad.



Introductory Combinatorics, 4/e

Richard A. Brualdi

ISBN: 9788131718827 | © Year: 2008 | Pages: 640

About the Book

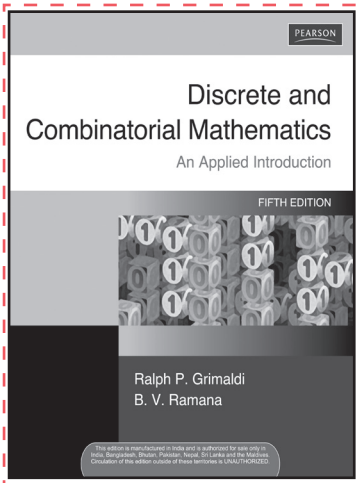
This, the best selling book in its market, emphasizes combinatorial ideas including the pigeon-hole principle, counting techniques, permutations and combinations, Pólya counting, binomial coefficients, inclusion-exclusion principle, generating functions and recurrence relations, and combinatortial structures (matchings, designs, graphs), flows in networks.

Features

- NEW - New problems in each chapter-Many more challenging problem sets have been added.
- Presents an excellent treatment of Polya's Counting Theoremthat doesn't assume students have seen group theory.
- Many worked examples.

Contents

1. What Is Combinatorics?
2. The Pigeonhole Principle
3. Permutations and Combinations
4. Generating Permutations and Combinations
5. The Binomial Coefficients
6. The Inclusion-Exclusion Principle and Applications
7. Recurrence Relations and Generating Functions
8. Special Counting Sequences
9. Matchings in Bipartite Graphs
10. Combinatorial Designs
11. Introduction to Graph Theory
12. Digraphs and Networks
13. More on Graph Theory
14. Polya Counting



Discrete and Combinatorial Mathematics: An Applied Introduction, 5/e

Ralph P. Grimaldi • B. V. Ramana

ISBN: 9788177584240 | © Year: 2006 | Pages: 1056

About the Book

This fifth edition continues to improve on the features that have made it the market leader. The text offers a flexible organization, enabling instructors to adapt the book to their particular courses. The book is both complete and careful, and it continues to maintain its emphasis on algorithms and applications. Excellent exercise sets allow students to perfect skills as they practice. This new edition continues to feature numerous computer science applications-making this the ideal text for preparing students for advanced study.

Features

- Historical reviews and biographies bring a human element to their assignments.
- Chapter summaries allow students to review what they have learned.
- Expanded treatment of discrete probability in Chapter 3.
- New material on cryptology, private-key cryptosystems in Chapter 13, public-key RSA cryptosystems in Chapter 15.

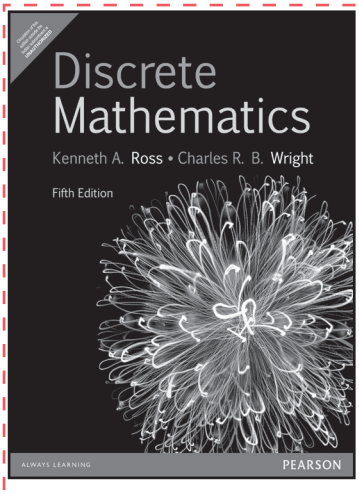
Contents

1. Fundamental Principles of Counting
2. Fundamentals of Logic
3. Set theory
4. Properties of the integers:Mathematical Induction
5. Relations and Functions
6. Language:Finite State Machines
7. Relations:The Second Time Around
8. The Principle of Inclusion and Exclusion
9. Generating Functions
10. Recurrence Relations
11. An introduction to graph theory
12. Trees
13. Rings and modular arithmetic
14. Boolean algebra and switching functions
15. Algebraic structures,semigroups,monoids,groups,coding theory and polya's method of enumeration
16. Finite fields and combinatorial designs

About the Authors

Ralph P. Grimaldi, Rose-Hulman Institute of Technology.

B.V. Ramana, Professor of Mathematics, JNTU College of Engineering, Kakinada, India & Professor of Mathematics, Eritrean Institute of Technology, Eritrea (N. E. Africa) (0n Special duty).



Discrete Mathematics, 5/e

Kenneth A. Ross • Charles R. B. Wright

ISBN: 9788131790618 | © Year: 2012 | Pages: 635

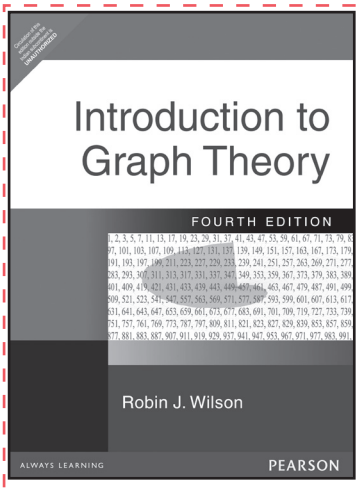
About the Book

Revised for extra clarity, the distinguishing characteristic of Ross and Wright is a sound mathematical treatment that increases smoothly in sophistication. The text presents utility-grade discrete math tools so students can understand them, use them, and move on to more advanced mathematical topics

Features

- NEW - Over 270 supplementary exercises—All with answers.
- NEW - Full chapter on discrete probability.
- NEW - Chapter on algebraic structures.
- Comprehensive coverage of logic and proofs.
- Full chapter on recursion.

Contents



Introduction to Graph Theory, 4/e

Robin J. Wilson

ISBN: 9788131706985 | © Year: 2002 | Pages: 184

About the Book

Graph Theory has recently emerged as a subject in its own right, as well as being an important mathematical tool in such diverse subjects as operational research, chemistry, sociology, and genetics. This book provides a comprehensive introduction to the subject.

Features

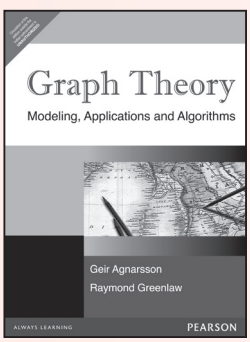
- Provides a basic foundation for the course.
- Text has been completely revised.
- Includes full range of exercises of varying difficulty.
- Incorporates new material on algorithms, tree-searches, and graph-theoretical puzzles.
- Full solutions are provided for many of the exercises.
- Includes a chapter on matroid theory, which is used to consolidate some of the material from earlier chapters.

Contents

About the Author

Robin J. Wilson is Dean and Director of Studies in the Faculty of Mathematics and Computing at the Open University.

Also Available



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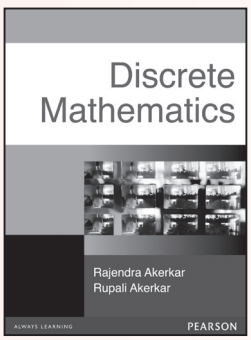

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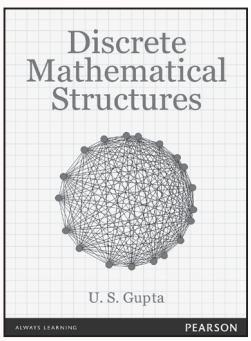

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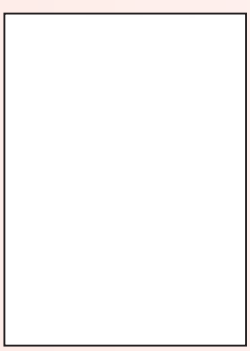

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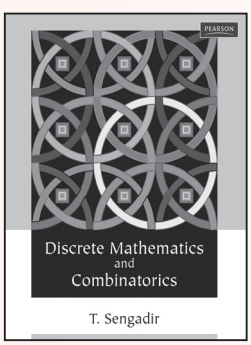

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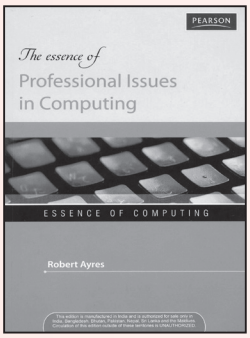
Pages: 568

Essence Series



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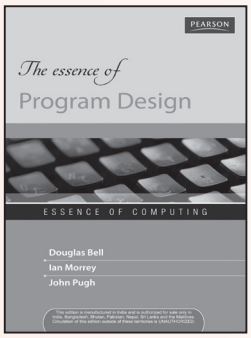

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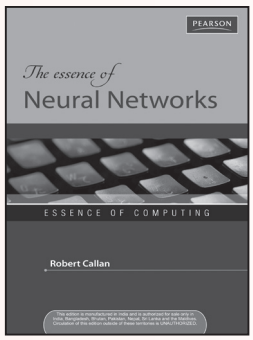

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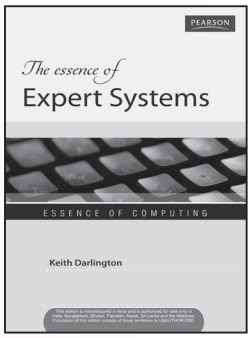

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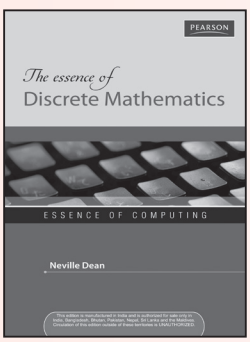

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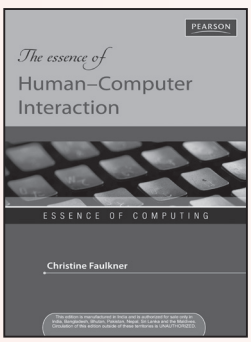

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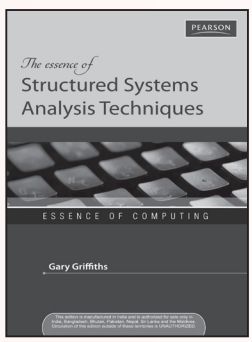
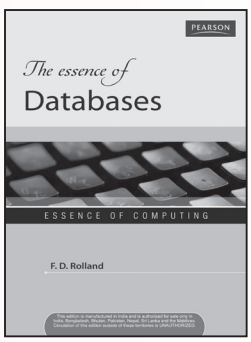
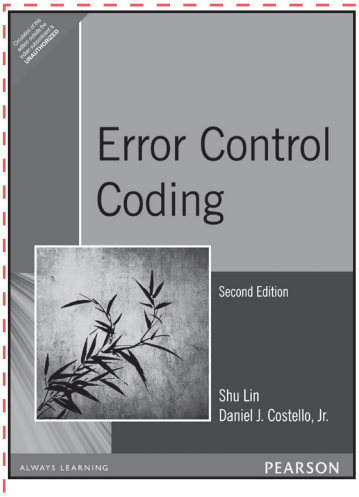


ISBN: 9788131756805
Pages: 256



ISBN: 9788131756768
Pages: 240



Error Control Coding, 2/e

Shu Lin • Daniel J. Costello, Jr.

ISBN: 9788131734407 | © Year: 2010 | Pages: 1272

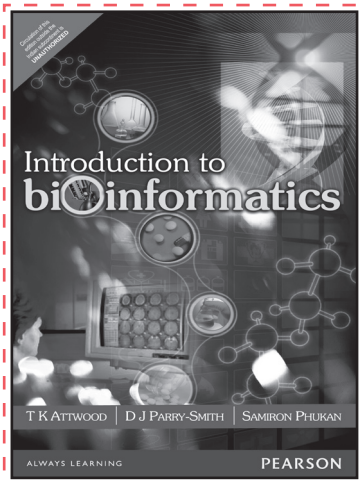
About the Book

A reorganized and comprehensive major revision of a classic textbook. This text provides a bridge between introductory courses in digital communications and more advanced courses in information theory. Completely updated to cover the latest developments. It presents state-of-the-art error control techniques.

Features

- Mathematical background required is kept to a minimum.
- Fundamental ideas from modern algebra necessary to understand algebraic coding techniques are covered in one chapter.
- Fundamentals and philosophy of the first edition remain unchanged.
- Coverage of the fundamentals of coding and the applications of codes to the design of real error control systems.
- Coverage of all developments in coding since the first edition was published-Contains the most recent developments of coded modulation, trellises for codes, soft-decision decoding algorithms, turbo coding for reliable data transmission and other areas.
- New and revised problems-Most problems are direct applications of material covered in the text. Some more challenging problems are included for advanced students.
- Hundreds of new and revised examples-And more than 200 illustrations of code structures, encoding and decoding circuits and error performance of many important codes and error control coding systems.

Contents



Introduction to Bioinformatics

T K Attwood • D J Parry-Smith • Samiron Phukan

ISBN: 9788177586411 | © Year: 2007 | Pages: 256

About the Book

Bioinformatics, the application of computers in the biological sciences, especially analysis of biological sequence data, is becoming an essential tool in molecular biology as genome projects generate vast quantities of data. With new sequences being added to DNA databases on an average of once a minute, there is a pressing need to convert this information into biochemical and biophysical knowledge by deciphering the structural, functional and evolutionary clues encoded in the language of biological sequences.

Features

- Unique guide to bioinformatics linked to an interactive practical on the World Wide Web.
- Introduces key databases, tools and resources, and outlines pitfalls of methods.
- The Web link integrates conventional and Web-based publishing, allowing interactive exploration of concepts discussed in the book.
- Includes numerous Further Reading suggestions, Web references and a useful Glossary.

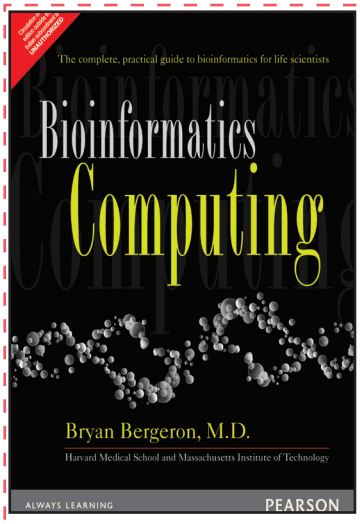
Contents

About the Authors

Dr T. K. Attwood is a Royal Society University Research fellow and Senior Lecturer in the School of Biological Sciences, University of Manchester, UK, Visiting Fellow at the European Bioinformatics Institute, and author and curator of the PRINTS protein fingerprint database.

Dr D. J. Parry-Smith is Informatics Director at Cambridge Drug Discovery Limited, Cambridge, UK, and works mainly with algorithm development.

Dr Samiron Phukan is Senior Scientist, SDMD Drug Discovery at Jubilant Biosys Limited, Bangalore, India.



Bioinformatics Computing

Brayan Bergeron, M.D.

ISBN: 9789332549418 | © Year: 2015 | Pages: 462

About the Book

The field of bioinformatics is growing at an unprecedented rate, as molecular biologists discover the extraordinary range of computational techniques and applications that apply directly to their work. Now, Harvard Medical School and MIT faculty member Bryan Bergeron has written a comprehensive, practical guide to bioinformatics for biology students at every level. Bergeron illuminates key advances in computer visualization, large database design, advanced pattern matching, machine learning, statistical methods, and distributed computing—and demonstrates exactly how these advances can be used to advance research into biological systems. Bergeron also identifies technologies and approaches on the near horizon that will have a significant impact on bioinformatics, and introduces the key global and societal issues most likely to shape bioinformatics in the coming years.

Features

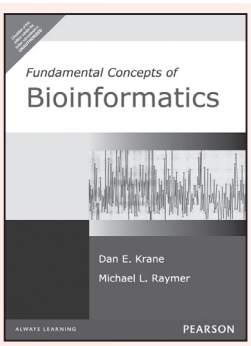
- Comprehensive introduction to computing techniques for Molecular Biologists.
- Bioinformatics is an IT growth sector ($10.4 Billion in 2000, forecasted to $38 Billion by 2006).
- Chapters on computing visualization, large database designs, advanced pattern matching and other key bioinformatics techniques.
- Bryan Bergeron is on the faculty at both Harvard Medical School and MIT.

Contents

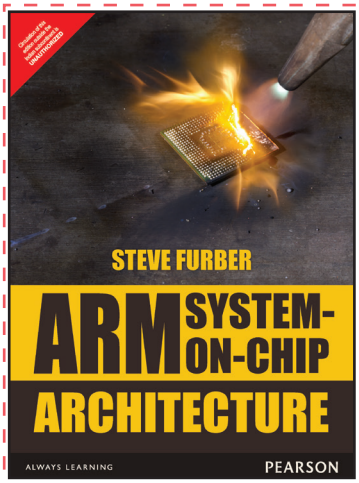
About the Author

Bryan Bergeron is a faculty member at both Harvard Medical School and MIT, Editor-in-Chief of e.MD, editorial board member of Healthcare Informatics, and Fellow of the American College of Medical Informatics. He has authored more than 300 publications on topics ranging from AI to computers in medicine.

Also Available



ISBN: 9788177587579
Pages: 328



ARM System-on-Chip Architecture

NEW

Steve Furber

ISBN: 9789332555570 | © Year: 2016 | Pages: 432

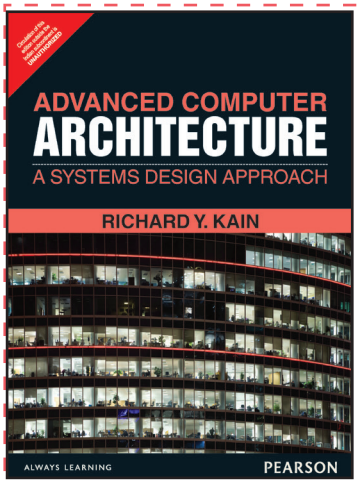
About the Book

ARM System-on-Chip Architecture presents and discusses the major issues of system-on-chip design, including memory hierarchy, caches, memory management, on-chip buses, on-chip debug and production tests. It provides an overview of the ARM processor family, enabling the reader to decide which ARM is best for the job in hand, describes the ARM and Thumb programming models enabling the designer to begin to develop applications. It also covers all the latest ARM products and developments, including StrongARM, the ARM9 and ARM10 series of cores, and the ARM-based SoC components at the heart of Ericsson's Bluetooth technology, the Psion Series 5 PDA and Samsung's SGH2400 GSM handset. It includes details on the AMULET asynchronous ARM cores and the AMULET3H asynchronous SoC subsystem. ARM System-on-Chip Architecture is an essential handbook for system-on-chip designers using ARM processor cores and engineers working with the ARM. It can also be used as a course text for undergraduate and masters students of computer science, computer engineering and electrical engineering.

Features

- ARM system-on-chip architecture.
- Presents and discusses the major issues of system-on-chip design, including memory hierarchy, caches, memory management, on-chip buses, on-chip debug and production tests.
- Provides an overview of the ARM processor family, enabling the reader to decide which ARM is best for the job in hand.
- Describes the ARM and Thumb programming models, enabling the designer to begin to develop applications.
- Covers all the latest ARM products and developments, including StrongARM, the ARM9 and ARM10 series of cores, and the ARM-based SoC components at the heart of Ericssons Bluetooth technology, the Psion Series 5 PDA and Samsungs SGH2400 GSM handset.
- Includes details on the AMULET asynchronous ARM cores and the AMULET3H asynchronous SoC subsystem.

Contents



Advanced Computer Architecture: A Systems Design Approach

Richard Y. Kain

ISBN: 9789332551923 | © Year: 2015 | Pages: 907

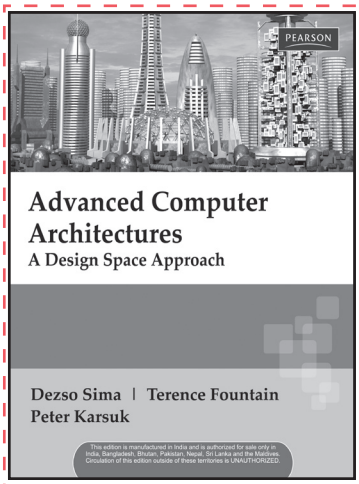
About the Book

This is an advanced level text on computer architecture presenting a coherent approach to computer system design and encompasses most of the design problems and solution options_starting from the structures of contemporary programming languages and operating systems, extending inward to the processor's architecture and its implementation. It provides basic techniques covering the relationships between software and hardware levels of system implementation and operation.

Features

- Shows examples of historically important processor designs.
- Lists important concepts and design options at the end of each chapter.
- Many examples written in C++.
- Draws examples from contemporary microprocessors such as PowerPC601, SPARC-Version 9, MIPs, and DEC's Alpha AXP.
- Helps to understand the choices in designing a complete computer system.

Contents



Advanced Computer Architectures: A Design Space Approach

Dezso Sima • Terence Fountain • Peter Kacsuk

ISBN: 9788131702086 | © Year: 2002 | Pages:792

About the Book

This timely book provides an unconventional and up-to-date overview of all the important computer architectures and is one of the first texts to present all the relevant concepts of advance architecture classes by exploring their design spaces. **Advanced Computer Architectures** will prove an indispensable guide for anyone who needs to be acquainted with the relevant concepts and solutions introduced in recent years to the dramatically changing world of computer architecture. For the student of advance level courses in computer architecture, this book will provide a comprehensive and accessible overview of the subject whilst its strong orientation will make it an invaluable reference for the practitioner.

Features

- Explores design spaces for each architecture class and Exposes evolution of concepts and design issues.

- Provides an up-to-date overview of significant architecture classes, including unique in-depth coverage of superscalar architectures as well as multithreaded, shared and distributed memory MIMDs, and associative and neural architectures.
- Identifies which concepts and design choices have been made use of in important processors and illustrates significant trends and surpasses and viable concepts.
- Case Studies and tables show micro architectural details of relevant processors, including the Pentium Pro, Power PC 604, Power PC 620 and R10000, allowing comparisons between them.

Contents

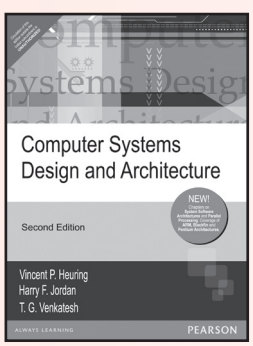
About the Authors

Professor Dezos Sima is Director of the Department of Informatics at the Kando Polytechnic in Budapest where he has specialized in computer architecture since 1972. He has published two books and over thirty papers.

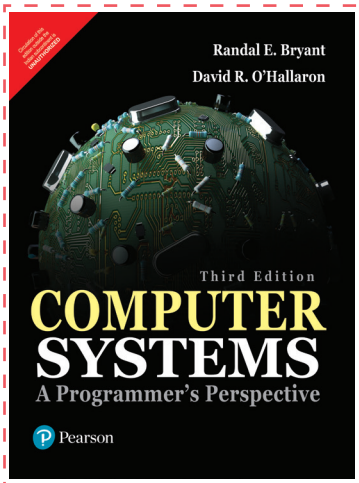
Terry Fountain is reader in Applied Physics at University College London. He has published four previous books on computer architecture.

Prof Peter Kacsuk is Head of the Laboratory of Parallel and Distributed System at the MTA SZTAKI research institute of the Hungarian Academy of Sciences.

Also Available



ISBN: 9788177584837
Pages: 744



Computer Systems: A Programmer's Perspective, 3/e

Randal E. Bryant • David R. O'Hallaron

NEW

ISBN: 9789332573901 | © Year: 2016 | Pages: 1120

About the Book

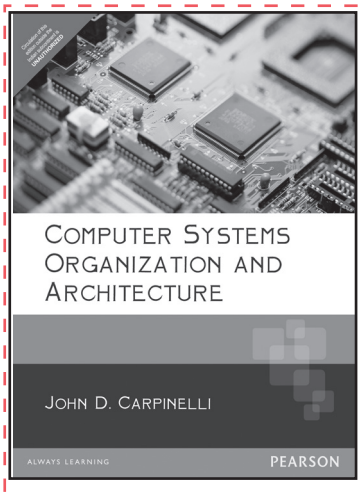
Computer systems: A Programmer's Perspective explains the underlying elements common among all computer systems and how they affect general application performance. Written from the programmer's perspective, this book strives to teach students how understanding basic elements of computer systems and executing real practice can lead them to create better programs.

Features

A carefully planned 12 chapter layout that covers all of the core topics of computer programming:

- uses a simple "hello world" program to introduce the major concepts and themes of computer programming.
- dives into the topic of computer arithmetic, considering how numbers are represented in computer programs and how they affect value coding. The chapter places a special emphasis on the properties of unsigned and two's-compliment number representations. It gives students necessary insight into arithmetic from the programmers perspective and why it's so important.
- teaches students how to read the x86-64 code generated by a C compiler, covering the basic instruction patterns for different control constructs, implementation procedures, and the allocation of different data structures. This chapter also discusses the implementation of integer and floating point arithmetic and takes a machine-level view of programs to understand certain code vulnerabilities.
- introduces students to basic combinational and sequential logic elements and shows how they can be used in a simplified subset of the x86-64 instruction set called Y86-64. It starts with a single-cycle datapath and moves onto a discussion of pipelining.
- gives students techniques for improving code performance with transformations that reduce work and enhance instruction-level parallelism.
- covers different types of RAM and ROM memory systems, describing their hierarchical arrangement. The chapter makes the abstract concept tangible by using the analogy of a "memory mountain" with ridges of temporal locality and slopes of spatial locality. Students learn that improving temporal and spatial locality improves performance.
- discusses both static and dynamic linking, areas included in most systems text where programmers make their most confusing errors.
- explains exceptional control flow at all levels of the system, from simple hardware interrupts to nonlocal jumps in C that break the stack discipline. This chapter introduces the fundamental idea of a process by teaching students how it works and how it is created and manipulated from application programs.
- shows students key characteristics of the virtual memory system and how it works, addressing issues such as managing and manipulating. This chapter shows the benefits of covering the hardware and software aspects of computer systems in a unified way, which most books do not.
- covers the basic concepts of Unix I/O, such as files and descriptors. It explains how files are shared, how I/O redirection works, and how to access file metadata.
- discusses networks, I/O devices that tie together many of the ideas presented earlier in the text. It describes the client-server model that underlies all network applications and presents a programmer's view of the internet.
- uses internet design as an example that introduces students to concurrent programming. By comparing and contrasting the three basic mechanisms for writing concurrent programs (processes, I/O multiplexing, and threads) students learn how to build concurrent internet servers.

Contents



Computer Systems Organization and Architecture

John D. Carpinelli

ISBN: 9788177587678 | © Year: 2002 | Pages: 608

About the Book

Computer Systems Organization and Architecture provides up-to-date coverage of fundamental concepts for the design of computer and their subsystems. Professor John Carpinelli presents material in this book in the same way he does in his classroom—by using simple examples to help readers understand concepts without getting bogged down in details. To make the material accessible to all readers, he has included two examples of increasing complexity: the Very Simple CPU which contains four instructions to illustrate very simple CPU design, and the somewhat more complex Relatively Simple CPU that builds upon the same design techniques and introduces some more advanced techniques.

Features

- Uses a finite state machine approach to provide a clear understanding of how the CPU performs a sequence of operations to fetch, decode, and execute instructions.
- Covers completely the design of computer systems, including memory hierarchies, input/output processing, interrupts and direct memory access, as well as advanced architectural aspects of parallel processing.
- Integrates open-ended design problems throughout the book to encourage readers to think through the design process.
- Contains extensive examples of real-world components and systems such as the Itanium microprocessor and cache and virtual memory management in Windows computer, and commodity used standards like the IEEE 754 Floating Point Standard and the Universal Serial Bus Standard.
- Provides "Practical Perspective" sidebars to help readers understand why systems are designed the way they are by applying them to real systems.
- Includes access to a CPU Simulator which animates the flow of data within the CPU to give readers unique insight into how the CPU works.

Contents

About the Author

John D. Carpinelli is an Associate Professor at New Jersey Institute of Technology, where he holds appointments in both the Department of Electrical and Computer Engineering and the Department of Computer and Information Sciences.

Computer System Architecture, 3/e (Updated)

M. Morris Mano

New Edition

ISBN: TBA | © Year: 2017 | Pages: 648

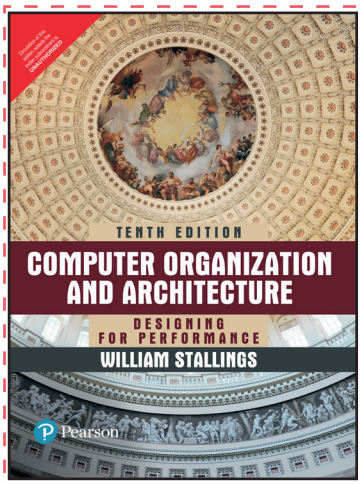
About the Book

Focused primarily on hardware design and organization — and the impact of software on the architecture — this volume first covers the basic organization, design, and programming of a simple digital computer, then explores the separate functional units in detail.

Features

- Develops an elementary computer to demonstrate by example the organization and design of digital computers.
- Uses a simple register transfer language to specify various computer operations.

Contents



Computer Organization and Architecture, 10/e

William Stallings

New Edition

ISBN: 9789332570405 | © Year: 2016 | Pages: 864

About the Book

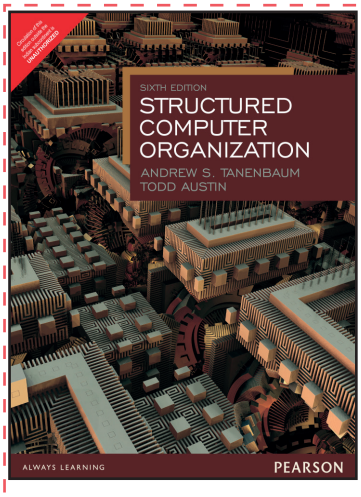
With clear, concise, and easy-to-read material, the tenth edition of Computer Organization and Architecture is a user-friendly source for students studying computers. Subjects such as I/O functions and structures, RISC, and parallel processors have been integrated with real-world examples throughout. Using brand new material and strengthened pedagogy, this text ensures that students are effectively engaged in the world of computer organization and architecture.

Features

- Chapter on GPUs (General Purpose Computing on Graphics Processing Units), highlighting one of the most important new developments in computer science.
- Heterogeneous Multicore Processors are surveyed in a new section of the text.
- Embedded Systems and Microcontrollers overview has been greatly expanded and revised.
- Cloud Computing is newly discussed in the text.
- System Performance issues coverage has been revised, expanded, and reorganized for a clearer and more

thorough treatment throughout the text.
- Flash Memory coverage has been revised and expanded with new information, including a new discussion of technology and organization of flash memory for internal and external memory.
- Nonvolatile RAM technologies like STT-RAM, PCRAM, and ReRAM are newly covered.
- Intel Core Microarchitecture continues to be used as a major example throughout with information reflecting newer Intel systems such as Intel Core Microarchitectur.

Contents



Structured Computer Organization,6e

Andrew S. Tanenbaum • Todd Austin

ISBN: 9789332571242 | © Year: 2016 | Pages: 784

About the Book

Structured Computer Organization, specifically written for undergraduate students, is a best-selling guide that provides an accessible introduction to computer hardware and architecture. This text will also serve as a useful resource for all computer professionals and engineers who need an overview or introduction to computer architecture.

This book takes a modern structured, layered approach to understanding computer systems. It's highly accessible - and it's been thoroughly updated to reflect today's most critical new technologies and the latest developments in computer organization and architecture. Tanenbaum's renowned writing style and painstaking research make this one of the most accessible and accurate books available, maintaining the author's popular method of presenting a computer as a series of layers, each one built upon the ones below it, and understandable as a separate entity.

Features

- Comprehensive coverage of computer hardware and architecture basics — Uses a clear, approachable writing style to introduce students to multilevel machines, CPU organization, gates and Boolean algebra, microarchitecture, ISA level, flow of controls, virtual memory, and assembly language.
- Accessible to all students — Covers common devices in a practical manner rather than with an abstract discussion of theory and concepts.
- Designed for undergraduate students — Not simply a watered-down adaptation of a graduate-level text.

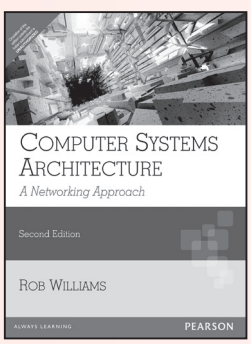
Contents

About the Authors

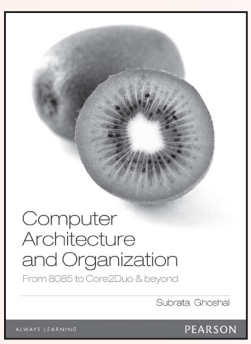
Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. Until 2005, he was the Dean of the Advanced School for Computing and Imaging, an inter-university graduate school doing research on advanced parallel, distributed, and imaging systems.

Todd Austinis a Professor of Electrical Engineering and Computer Science at the University of Michigan in Ann Arbor. His research interests include computer architecture, reliable system design, hardware and software verification, and performance analysis tools and techniques.

Also Available



ISBN: 9788131763476
Pages: 752



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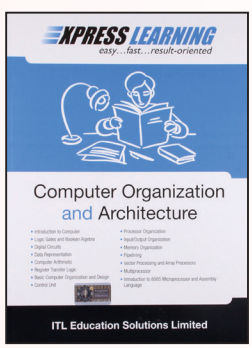

ISBN: 9788131773390
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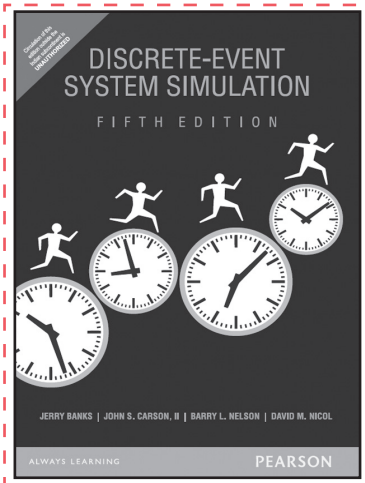


Discrete-Event System Simulation, 5/e

Jerry Banks • John S. Carson, II • Barry L. Nelson
David M. Nicol

ISBN: 9789332518759 | © Year: 2013 | Pages: 530

About the Book

While most books on simulation focus on particular software tools, Discrete Event System Simulation examines the principles of modeling and analysis that translate to all such tools. This language-independent text explains the basic aspects of the technology, including the proper collection and analysis of data, the use of analytic techniques, verification and validation of models, and designing simulation experiments. It offers an up-to-date treatment of simulation of manufacturing and material handling systems, computer systems, and computer networks.

Features

- Simulation of Communications Systems includes new material on simulation beta distribution, negative binomial distribution and non-stationary processes.
- Subset selection methods used for output analysis of several alternatives are discussed.
- Numerous solved examples enhance understanding of concepts.
- Abundant figures, tables and end-chapter exercises are provided.
- Application topics promote understanding of real-world uses.
- Interpretation of simulation software output explains how to use software tools correctly.
- Discussion of simple tools for complex input modeling problems develops more realistic valid models.

Contents

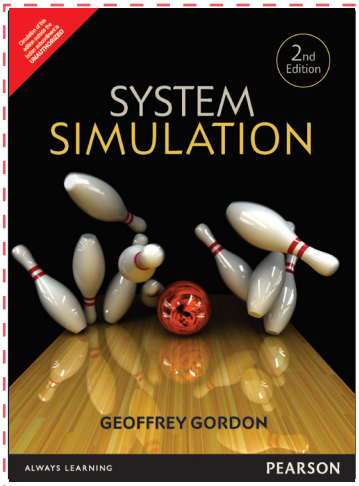
About the Authors

Jerry Banks retired in 1999 as a professor in the School of Industrial and Systems Engineering, Georgia Institute of Technology, after which he worked as senior simulation technology advisor for Brooks Automation; he is currently a professor at Techno´ogico de Monterrey, M´exico.

John S. Carson II is an independent simulation consultant. He has over 30 years experience in simulation in a wide range of application areas and has taught simulation and operations research at the Georgia Institute of Technology and the University of Florida.

Barry L. Nelson is the Charles Deering McCormick Professor and Chair of the Department of Industrial Engineering and Management Sciences at Northwestern University.

David M. Nicol is professor of electrical and computer engineering at the University of Illinois at Urbana-Champaign. He is a long-time contributor in the field of parallel and distributed discrete-event simulations.



System Simulation, 2/e

Geoffrey Gordon

ISBN: 9789332550247 | © Year: 2015 | Pages: 336

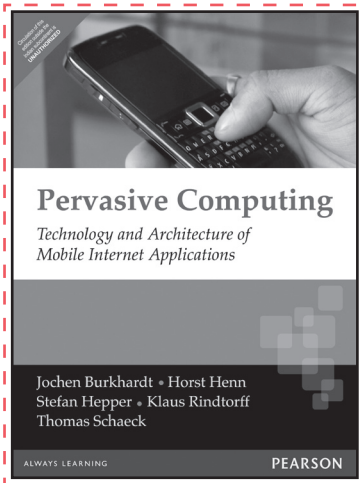
About the Book

Besides providing an excellent coverage of fundamental concepts and applications, the author uses simulation programming languages and covers also socio-economic problems. He introduces students to topics and techniques of system simulation and covers both continuous and discrete simulation. The book's illustrative problems come from a wide diversity of realistic situations in engineering, economics, business, medicine, biology, and socio-economics. Basic concepts of statistics and probability theory are reviewed in detail, and techniques for analyzing system simulation results are presented.

Contents

About the Author

Gordon Rogers was, until retirement, Professor of Engineering Thermodynamics at the University of Bristol, He is author, with Y.R. Mayhew, of Engineering Thermodynamics Work and Heat Transfer, 4th edition. The late Henry Cohen, was formerly University Lecturer and Director of Studies in Engineering at Queen's College, Cambridge.



Pervasive Computing

Jochen Burkhardt • Horst Henn • Stefan Hepper
Klaus Rindtorff • Thomas Schaeck

ISBN: 9788177582802 | © Year:2004 | Pages: 432

About the Book

This book offers a complete introduction to **pervasive computing**, also known as mobile computing, ubiquitous computing and anywhere/anywhen computing. The book features case studies of applications and gives a broad overview of pervasive computing (devices, standards, protocols,architectures). The book also covers and includes analysis and categorisation of existing technologies and solid information to help integrate pervasive computing applications into existing e-business applications.

Features

- Introduction to pervasive devices and their applications.
- Overview of the key technologies and protocols.
- Web application concepts.
- WAP and beyond.
- Voice Technology.
- Server-side programming in Java.
- Pervasive web application architecture.
- Device-independent example application.
- Accessing the example application via PC, PDA, WAP and voice.

Contents

About the Authors

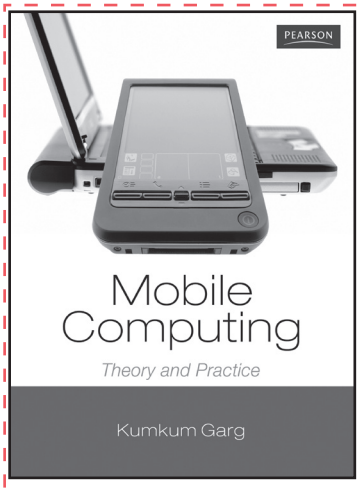
Jochen Burkhardt works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Dr. Horst Henn works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Stefan Hepper works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Klaus Rindtorff works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Thomas Schack works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.



Mobile Computing: Theory and Practice

Kumkum Garg

ISBN: 9788131731666 | © Year: 2010 | Pages: 232

About the Book

An undergraduate text on **mobile computing**, covering all the basic concepts of mobile computing as well as mobile communication. The book also deals with the new concepts that have emerged in recent years like Bluetooth Security and topics on Nokia Handhelds (a topic exclusive to this book).

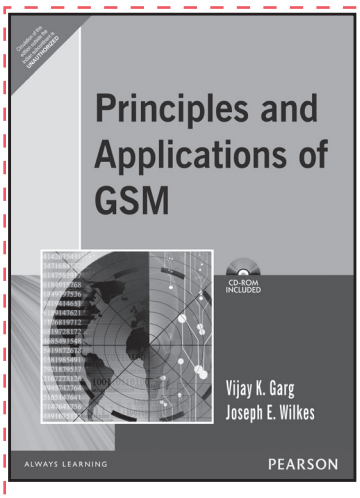
Features

- Case-Studies on topics like Coda File System, Mica Mote and Tiny OS present in the book.
- Topics like Bluetooth Security, WAP, Wireless Sensor Networks discussed.
- An appendix on Java and Network Programming for mobile applications is provided.
- Excellent pedagogy – Subjective and Objective Type questions.

Contents

About the Author

Prof. Kumkum Garg is Professor of Computing at IIT Roorkee. She obtained her M.Tech. in CSE from the University of Roorkee (now IIT Roorkee), and Ph.D. from Imperial College, London. She was awarded the Apple Distinguished Educator (ADE) award in 2006, for 'commitment to the promise of educational technology in the classroom and beyond'. Dr Garg is a Senior Member of IEEE, Fellow of the Institution of Engineers (I) and Life Member of various professional societies, including the ISTE, SMATAC and ISCEE. She has over 38 years experience in teaching and research.



Principles and Applications of GSM

Vijay K. Garg • Joseph E. Wilkes

ISBN: 9788177588798 | © Year: 2002 | Pages: 504

About the Book

The book presents fundamental concepts providing a foundation for understanding the technical aspects of speech and channel coding, modulation, propagation, and other items which are used for GSM and common with its derivative. It provides sufficient details so that the reader can understand the related wireless standards. Also, it allows the reader to apply the concepts to practical wireless systems.

Features

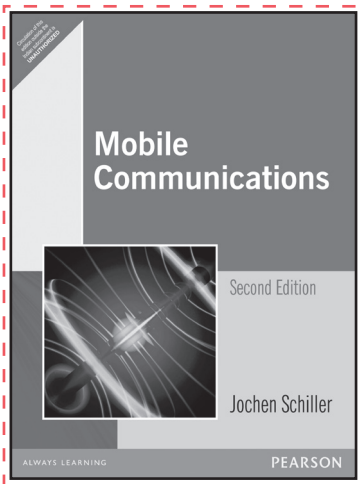
- The complete guide to designing wireless systems with GSM -- the hottest mobile technology on Earth.
- Soup to nuts coverage: GSM architecture, interfaces, radio links, logical channels, coding, and much more.
- Planning, design, traffic engineering and network management.
- Wireless data, low mobility adjuncts, and future GSM enhancements.

Contents

About the Authors

Vijay K. Garg is a Distinguished Member of Technical Staff at Lucent Technologies (formerly AT&T Bell Laboratories). His responsibilities include design of GSM-based systems, evaluation of the performance. and capacity of mobile switching centers, and specification of operations system requirements for wireless networks.

Joseph E. Wilkes was on the team that designed the world's first cellular system, and is principal author of the original EIA compatibility specification for cellular telephones. He is currently a Senior Research Scientist at Bellcore.



Mobile Communications, 2/e

Jochen Schiller

ISBN: 9788131724262 | © Year: 2008 | Pages: 512

About the Book

Mobile Communications introduces the topic by providing a thorough grounding in the field of mobile communications. A wide range of examples is combined with a strong pedagogy to allow the book's use in high level courses and for self-study. This book provides a non-mathematical, computer science focus.

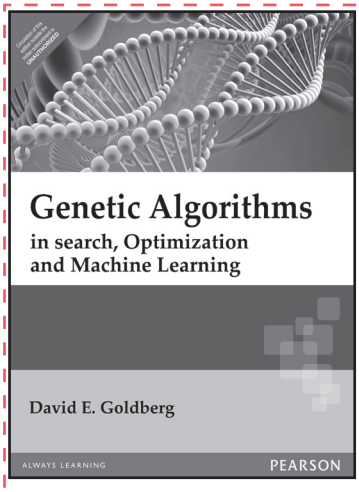
Features

- Contains over 150 questions, over 250 illustrations, and a comprehensive glossary.
- Explains the most current developments in mobile communications in both research and industry in a well-structured context with detailed technical background.
- Conclude chapters with a set of exercises for self-study and references to standards, organizations, and research work related to the topic.
- Provides an up-to-date idea of the mobile/wireless communications field.
- Significant changes to be on top of this fast-developing topic.

Contents

About the Author

Jochen H. Schiller received his Masters and PhD degrees in computer science from the University of Karlsruhe, Germany, in 1993 and 1996, respectively. In 1996 -1997 he was a DFG postdoctoral research fellow at the Department of Computer Systems, Uppsala University, Sweden.



Genetic Algorithms in search, Optimization and Machine Learning

David E. Goldberg

ISBN: 9788177588293 | © Year: 2006 | Pages: 432

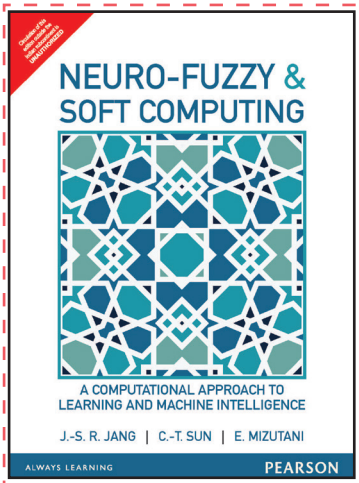
About the Book

The text introduces the theory, operation, and application of genetic algorithms—search algorithms based on the mechanics of natural selection and genetics. This book, suitable for both course work and self-study, brings together for the first time, in an informal, tutorial fashion, the computer techniques, mathematical tools, and research results that will enable both students and practitioners to apply genetic algorithms to problems in many fields: programmers, scientists, engineers, mathematicians, statisticians and management scientists will all find interesting possibilities here. Major concepts are illustrated with running examples, and Pascal computer programs illustrate major algorithms. Chapter concludes with exercises and computer assignments. No prior knowledge of Gas or genetics is assumed.

Contents

About the Author

David E. Goldberg is presently Associate Professor of Engineering Mechanics at the University of Alabama. He received his Ph.D. from the University of Michigan. As a graduate student at the University of Michigan, he spearheaded a successful project applying genetic algorithms and classifier systems to the control of natural gas pipelines. He has continued his research in genetic algorithms and classifier systems, and has had 12 years of consulting experience in industry and government and has published numerous articles and papers.



Neuro-Fuzzy & Soft Computing: A Computational Approach to Learning and Machine Intelligence

J.-S. R. Jang • C.-T. Sun • E. Mizutani

ISBN: 9789332549883 | © Year: 2015 | Pages: 614

About the Book

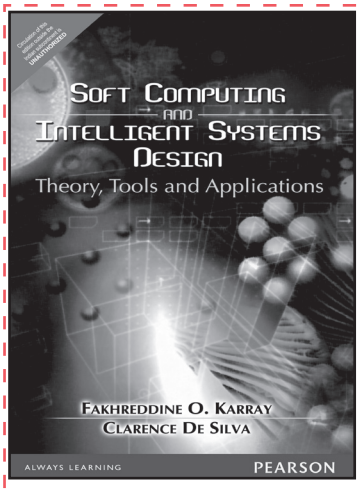
This text provides the first comprehensive treatment of the methodologies underlying neuro-fuzzy and soft computing, an evolving branch within the scope of computational intelligence. The book places equal emphasis on theoretical aspects of covered methodologies, empirical observations and verifications of various applications in practice.

Features

- The book is oriented toward methodologies that are likely to be of practical use; many step-by-step examples are included to complement explanations in the text. Pg.___.

- Specially designed figures provide a visual reinforcement for as many ideas and concepts as possible. These figures were generated using MATLAB and these MATLAB files are available via FTP or WWW. Pg.___.
- Includes exercises, some of which involve MATLAB programming tasks which can be expanded into suitable term projects. This will provide the student with hands-on programming experiences for practical problem-solving. Pg.___.
- Each chapter includes a reference list to the research literature. This will enable students to pursue individual topics in greater depth. Pg._.

Contents



Soft Computing and Intelligent Systems Design: Theory, Tools and Applications

Fakhreddine O. Karray • Clarence De Silva

ISBN: 9788131723241 | © Year: 2009 | Pages: 584

About the Book

Traditional artificial intelligence (AI) techniques are based around mathematical techniques of symbolic logic, with programming in languages such as Prolog and LISP invented in the 1960s. These are referred to as "crisp" techniques by the soft computing community. The new wave of AI methods seeks inspiration from the world of biology, and is being used to create numerous real-world intelligent systems with the aid of soft computing tools. These new methods are being increasingly taught at the upper end of the curriculum, sometimes as an adjunct to traditional AI courses, and sometimes as a replacement for them. Where a more radical approach is taken and the course is being taught at an introductory level, we have recently published Negnevitsky's book. Karray and Silva will be suitable for the majority of courses which will be found at an advanced level. Karray and de Silva cover the problem of control and intelligent systems design using soft-computing techniques in an integrated manner. They present both theory and applications, including industrial applications, and the book contains numerous worked examples, problems and case studies. Covering the state-of-the-art in soft-computing techniques, the book gives the reader sufficient knowledge to tackle a wide range of complex systems for which traditional techniques are inadequate.

Features

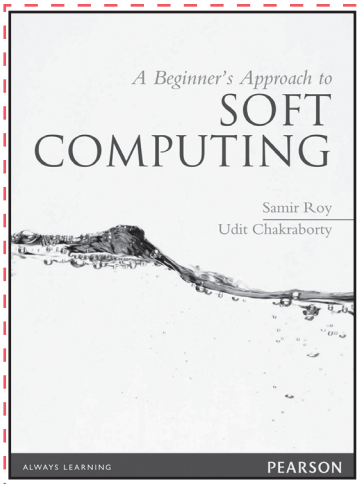
- Integrates theory and practice through the use of numerous worked examples.
- Includes case studies in different areas where soft-computing techniques are applied in real-world situations.
- Extensive coverage of control applications.
- Extensive student and lecturer support available via the Web (including Matlab files).

Contents

About the Authors

Fakhreddine O. Karray is Professor of Electrical and Computer Engineering and Systems Design Engineering at the University of Waterloo, Canada. He was Program Chair of the 2002 IEEE International Symposium on Intelligent Control, is Associate Editor of four related journals and writes extensively in the area.

Clarence De Silva is Professor of Mechanical Engineering at the University of British Columbia, Vancouver, Canada. He is Editor-in-Chief of the International Journal of Control and Intelligent Systems, writes extensively in the area and has served as a consultant for IBM and Westinghouse in the US.



A Beginner's Approach to Soft Computing

Samir Roy • Udit Chakraborty

ISBN: 9788131792469 | © Year: 2013 | Pages: 608

About the Book

Soft computing is a branch of computer science that deals with a family of methods that imitate human intelligence. This is done with the goal of creating tools that will contain some human-like capabilities (such as learning, reasoning and decision-making). This book covers the entire gamut of soft computing, including fuzzy logic, rough sets, artificial neural networks, and various evolutionary algorithms. It offers a learner-centric approach where each new concept is introduced with carefully designed examples/instances to train the mindset of the learner.

Features

- Excellent pedagogy.
- 145 unsolved and 112 solved questions.
- More than 500 figures.
- MCQs at the end of every chapter; more than 500 MCQs in total.
- MATLAB implementation.
- Summary at the end of every chapter.
- Detailed case studies are included to help the students get a practical perspective of the subject.

Contents

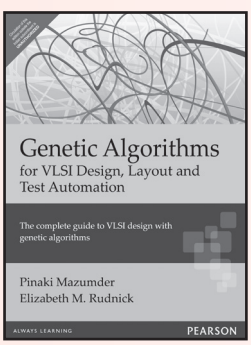
7. Pattern Classification with ANN's
8. Pattern Classification with ANN's
9. Competitive Neural Nets
10. Backpropagation
11. Elementary Search Techniques
12. Evolutionary Search Techniques
13. Hybrid Systems

About the Authors

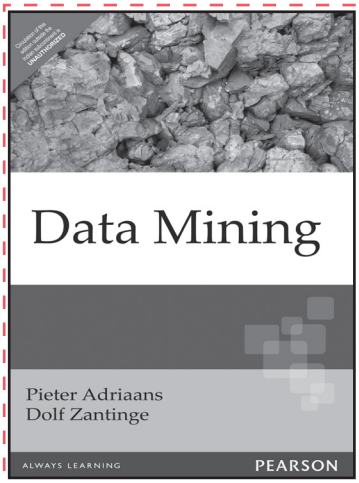
Samir Roy teaches at the Department of Computer Science & Engineering, National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, an autonomous institution under the Ministry of HRD, Government of India. He has taught different subjects of computer science for about twenty years at the undergraduate and postgraduate levels in various engineering colleges and training institutes. He has published about forty articles in international and national journals and conference proceedings. His areas of interest include artificial intelligence, soft computing, mathematical logic and educational informatics.

Udit Chakraborty is currently working with the Sikkim Manipal Institute of Technology as Associate Professor in the Department of Computer Science & Engineering. He has about ten years of teaching experience. His areas of interest include soft computing, natural language processing and algorithms. He has several research papers published in national and international conferences.

Also Available



ISBN: 9788177585742
Pages: 352



Data Mining

Pieter Adriaans • Dolf Zantinge

ISBN: 9788131707173 | ©Year: 2002 | Pages: 168

About the Book

Data Mining deals with discovering hidden data and unexpected patterns and rules in large databases. It can bring significant gains to organizations, for example, through better-targeted marketing and enhanced internal performance. This is the first book to offer a comprehensive introduction to data mining. Its aim is to provide essential insights and guidelines to help you make the right decisions when setting up a data mining environment.

The whole data mining process, including data selection, cleaning, coding, different pattern recognition techniques and reporting is illustrated by means of an extensive case study and numerous examples.

Features

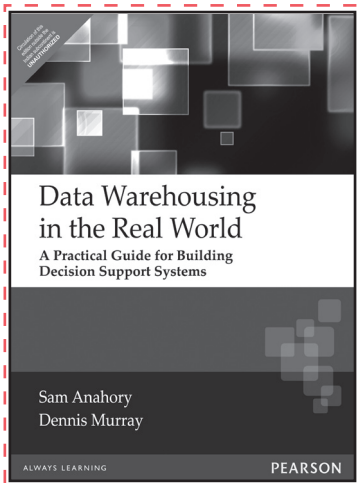
- What is Data mining?
- Which techniques are suitable for my data?
- How do I set up a data mining environment?
- How do I justify the costs?

Contents

About the Authors

Pieter Adriaans is a director of Syllogic, where he is responsible for the development of tools for the management of client/server systems and databases.

Dolf Zantinge has broad experience in setting up large client/server projects. He is also a director of Syllogi.



Data Warehousing in the Real World: A Practical Guide for Building Decision Support Systems

Sam Anahory • Dennis Murray

ISBN: 9788131704592 | © Year: 2002 | Pages: 368

About the Book

Data warehouses are the primary means by which businesses can gain competitive advantage through analyzing and using the information stored in their computerized systems. Data Warehousing in the Real World provides comprehensive guidelines and techniques for the delivery of decision support solutions using open-systems data warehouses. Written by practitioners for practitioners, this book describes each stage of the implementation process in detail.

Features

- Learn the fundamentals of designing large-scale data warehouses using relational technology.
- Take advantage of product-independent comprehensive guidelines which cover all the issues

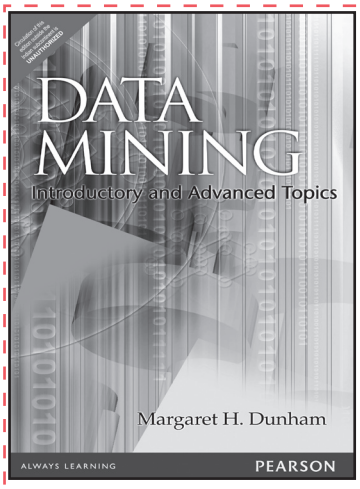
you need to take into account when planning and building a data warehouse.
- Benefit from the authors' experience distilled into helpful hints and tips.
- Apply to your own situation the examples of real-life solutions taken from a variety of different business sectors.
- Make use of the templates for project-plans, system architectures and database designs.

Contents

About the Authors

Sam Anahory is Director of Systems Integration at SHL Systemhouse, an MCI Company, where he runs their Data Warehousing practice, delivering end-to-end data warehousing business solutions to clients.

Dennis Murray is the Principal Consultant responsible for Large Scalable Solutions in Oracle Corporation's Europe, Middle East and Africa advanced technologies group.



Data Mining: Introductory and Advanced Topics

Margaret H. Dunham

ISBN: 9788177587852 | © Year: 2006 | Pages: 328

About the Book

Market: For undergraduate courses in Computer Science and Information Technology / MCA. In this book the author provides the reader with a comprehensive coverage of data mining topics and algorithms. Data base perspective is maintained throughout the book which provides students with a focused discussion of algorithms, data structures, data types and complexity of algorithms and space. It also emphasizes the use of data mining concepts in real-world applications with large database components.

Features

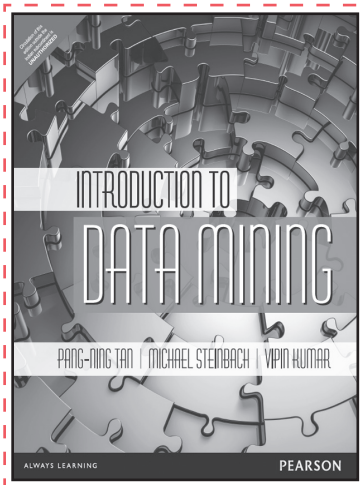
- Covers advanced topics such as Web Mining and Spatial/Temporal Mining.
- Includes succinct coverage of Data Warehousing, OLAP, Multidimensional Data, and Preprocessing.
- Concise coverage on distributed, parallel, and incremental algorithms.
- Provides case studies.
- Offers clearly written algorithms to better understand techniques.
- Algorithms are presented in a pseudocode.
- Includes a reference on how to use Prototypes and DM products.

Contents

About the Authors

Margaret H. Dunham received the B.A. and the M.S. in mathematics from Miami University in Oxford, Ohio. She earned the Ph.D. degree in computer science from Southern Methodist University. Professor Dunham's research interests encompass main memory databases, data mining, temporal databases, and mobile computing. She is currently an Associate Editor for IEEE Transactions on Knowledge and Data Engineering. She has published numerous technical papers in such research areas as database concurrency control and recovery, database machines, main memory databases, and mobile computing.

S. Sridhar is currently the director of Arunai Engineering College, Tiruvannamalai, Tamil Nadu, India.



Introduction to Data Mining

Vipin Kumar • Pang-Ning Tan • Michael Steinbach

ISBN: 9789332571402 | © Year: 2016 | Pages: 780

About the Book

Introduction to Data Mining presents fundamental concepts and algorithms for those learning data mining for the first time. Each concept is explored thoroughly and supported with numerous examples.

Each major topic is organized into two chapters, beginning with basic concepts that provide necessary background for understanding each data mining technique, followed by more advanced concepts and algorithms.

Features

- Provides both theoretical and practical coverage of all data mining topics.
- Includes extensive number of integrated examples and figures.
- Offers instructor resources including solutions for exercises and complete set of lecture slides.
- Assumes only a modest statistics or mathematics background without any requirement of database knowledge.
- Important topics such as predictive modeling, association analysis, clustering, anomaly detection, visualization covered.

Contents

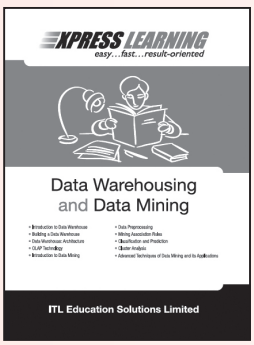
About the Authors

Pang-Ning Tan, Michigan State University

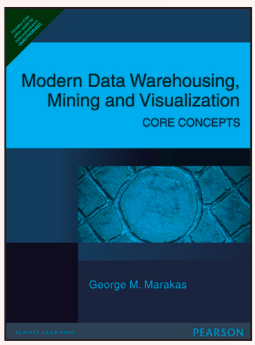
Michael Steinbach, University of Minnesota

Vipin Kumar, University of Minnesota

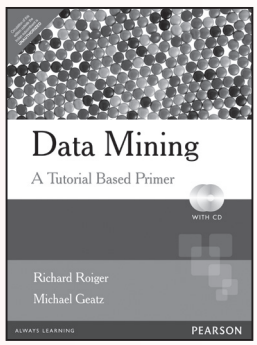
Also Available



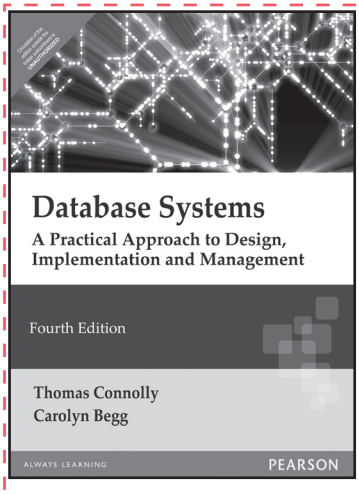
ISBN: 9788131773406
Pages: 272



ISBN: 9788131708767
Pages: 288



ISBN: 9788131715123
Pages: 404



Database Systems: A Practical Approach to Design, Implementation and Management, 4/e

Thomas Connolly • Carolyn Begg

ISBN: 9788131720257 | © Year: 2008 | Pages: 140

About the Book

This book places a strong emphasis on good design practice, allowing students to master design methodology in an accessible, step-by-step fashion. A clear introduction to design implementation and management issues, as well as an extensive treatment of database languages and standards, make this book an indispensable complete reference for database students and professionals. The book is designed to be used in database courses for technical and non-technical students.

Features

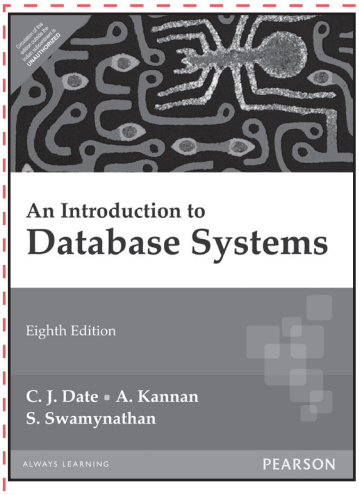
- Uses UML notation for ER diagrams.
- Database design methodology is explicitly divided into three phases: conceptual, logical, and physical. Each phase is described in a separate chapter with an example of the methodology working in practice.
- Extensive treatment of SQL in three tutorial style chapters.
- Comprehensive introduction to data warehousing, OLAP, and data mining.
- Extensive treatment of the Web as an emerging platform for database applications with many code samples for accessing databases from the Web including JDBC, SQLJ, ASP, ISP, and Oracle's PSP.

Contents

About the Book

Thomas Connolly is the head of the Computing and Information Systems division at the University of Paisley.

Carolyn Begg is a lecturer at the University of Paisley, with research interests in Information Systems, Database Management Systems, and Decision Support Systems within medicine.



An Introduction to Database Systems, 8/e

C. J. Date • A. Kannan • S. Swamynathan

ISBN: 9788177585568 | © Year: 2006 | Pages: 968

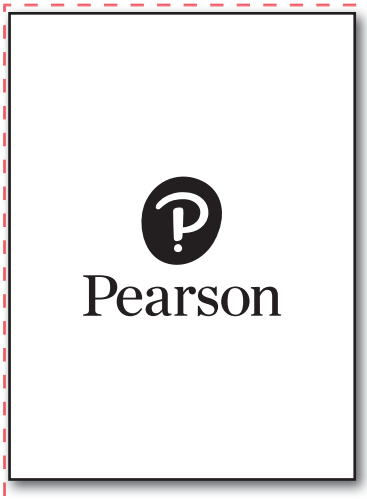
About the Book

An introduction to database systems provides a comprehensive introduction to the very large field of database systems. It furnishes a solid grounding in the foundations of database technology, while shedding some light on how the field is likely to develop in the future. This edition has been expanded and rewritten to stay current with database system trends and developments, however the overall emphasis remains on insight and understanding, and not just on formalisms.

Features

- SQL coverage has been upgraded to the level of current standard.
- Provides exceptionally strong and expanded coverage of the relational model.
- Material on types or domains has been expanded for wider coverage.
- Chapter 9 on Integrity has been completely rewritten for better understanding.
- Chapter 15 on Recovery and Chapter 16 on Concurrency provides extensive details.
- Includes careful analysis of some unorthodox transactions.
- Chapter 20 on Type Inheritance and chapter 23 on Temporal Databases have been completely rewritten to reflect latest research developments.M
- Chapter 27 on XML covers the relationship between databases and emerging XML standards.
- The appendices include An overview of the TransRelational Model, A BNF grammar for SQL expressions, A glossary of important abbreviations,acronyms and symbols used in the text and Storage Structures and Access Methods.

Contents



Fundamentals of Database Systems: Models, Languages, Design and Application Programming, 7/e

Ramez Elmasri • Shamkant B. Navathe

ISBN: TBA | © Year: 2017 | Pages: 1240

New Edition

About the Book

This book introduces the fundamental concepts necessary for designing, using, and implementing database systems and database applications. Our presentation stresses the fundamentals of database modeling and design, the languages and models provided by the database management systems, and database system implementation techniques.

The goal is to provide an in-depth and up-to-date presentation of the most important aspects of database systems and applications, and related technologies. It is assumed that readers are familiar with elementary programming and data-structuring concepts and that they have had some exposure to the basics of computer organization.

Features

- Chapters have been reorganized to allow for flexible use of material.
- Chapters have been added and restructured to keep the text up-to-date with recent concepts and technology regarding database systems.
- Pedagogy and real world examples enhance the text throughout.

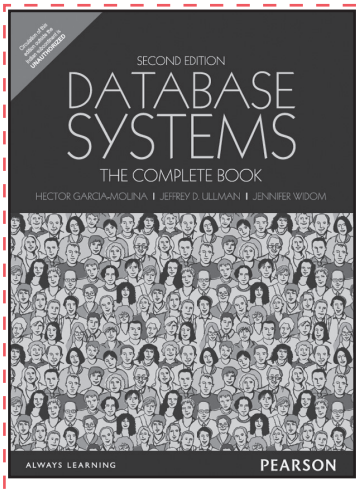
Contents

22. Database Recovery Techniques
23. Distributed Database Concepts
24. NOSQL Databases and Big Data Storage Systems
25. Big Data Technologies Based on MapReduce and Hadoop
26. Enhanced Data Models: Introduction to Active, Temporal, Spatial, Multimedia, and Deductive Databases
27. Introduction to Information Retrieval and Web Search
28. Data Mining Concepts
29. Overview of Data Warehousing and OLAP
30. Database Security

About the Authors

Ramez Elmasri is a professor and the associate chairperson of the Department of Computer Science and Engineering at the University of Texas at Arlington. He has over 140 refereed research publications, and has supervised 16 PhD students and over 100 MS students. His research has covered many areas of database management and big data, including conceptual modeling and data integration, query languages and indexing techniques, temporal and spatio-temporal databases, bioinformatics databases, data collection from sensor networks, and mining/analysis of spatial and spatio-temporal data. He has worked as a consultant to various companies, including Digital, Honeywell, Hewlett Packard, and Action Technologies, as well as consulting with law firms on patents.

Shamkant B. Navathe is a professor and the founder of the database research group at the College of Computing, Georgia Institute of Technology, Atlanta. He has worked with IBM and Siemens in their research divisions and has been a consultant to various companies including Digital, Computer Corporation of America, Hewlett Packard, Equifax, and Persistent Systems.



Database Systems: The Complete Book , 2/e

Hector Garcia-Molina • Jeffrey D. Ullman • Jennifer Widom

ISBN: 9789332518674 | © Year: 2013 | Pages: 1139

About the Book

This book introduces the fundamental concepts necessary for designing, using, and implementing database systems and database applications. Our presentation stresses the fundamentals of database modeling and design, the languages and models provided by the database management systems, and database system implementation techniques.

The goal is to provide an in-depth and up-to-date presentation of the most important aspects of database systems and applications, and related technologies. It is assumed that readers are familiar with elementary programming and data-structuring concepts and that they have had some exposure to the basics of computer organization.

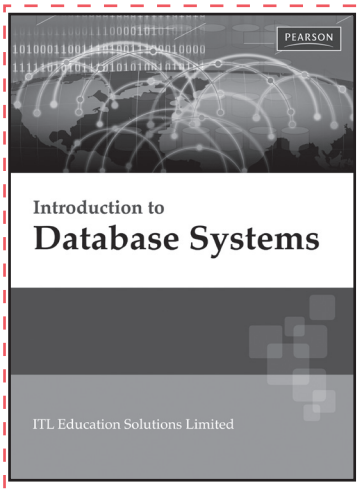
Features

- Chapters have been reorganized to allow for flexible use of material.
- Chapters have been added and restructured to keep the text up-to-date with recent concepts and technology regarding database systems.
- Pedagogy and real world examples enhance the text throughout.

Contents

1. Databases and Database Users
2. Database Systems Concepts and Architecture
3. Data Modeling Using the Entity Relationship (ER) Model
4. The Enhanced Entity Relationship (EER) Model
5. The Relational Data Model and Relational Database Constraints
6. Basic SQL
7. More SQL: Complex Queries, Triggers, Views, and Schema Modification
8. The Relational Algebra and Relational Calculus
9. Relational Database Design by ER- and EER-to-Relational Mapping
10. Introduction to SQL Programming Techniques
11. Web Database Programming Using PHP
12. Object and Object-Relational Databases

13. XLM: Extensible Markup Language
14. Basics of Functional Dependencies and Normalization for Relational Databases
15. Relational Database Design Algorithms and Further Dependencies
16. Disc Storage, Basic File Structures, Hashing, and Modern Storage Architectures
17. Indexing Structures for Files and Physical Database Design
18. Strategies for Query Processing
19. Query Optimization
20. Introduction to Transaction Processing Concepts and Theory
21. Concurrency Control Techniques
22. Database Recovery Techniques
23. Distributed Database Concepts
24. NOSQL Databases and Big Data Storage Systems
25. Big Data Technologies Based on MapReduce and Hadoop
26. Enhanced Data Models: Introduction to Active, Temporal, Spatial, Multimedia, and Deductive Databases
27. Introduction to Information Retrieval and Web Search
28. Data Mining Concepts
29. Overview of Data Warehousing and OLAP
30. Database Security



Introduction to Database Systems

ITL Education Solutions Limited

ISBN: 9788131731925 | © Year: 2010 | Pages: 580

About the Book

The book deals with implementation, design and application of DBMS and complicated topics such as relational algebra and calculus, and normalization are explained in a very simple manner.

Features

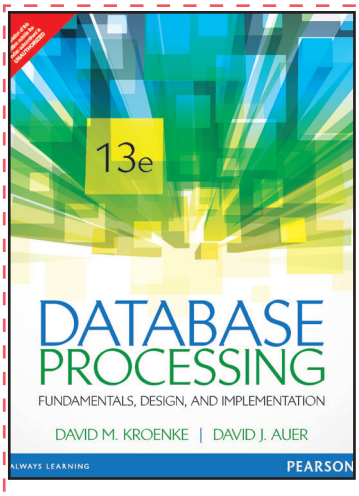
- Includes chapter objectives at the beginning of each chapter.
- Each chapter has 10 MCQ'S and 10 Fill in the Blanks
- More than 250 descriptive questions.
- More than 70 practical questions.
- Each chapter at the end has a list of Key terms along with the summary.
- Two chapters with case study each on Hospital management and Railway reservation system.
- Running marginalia with additional information on the subject.

Contents

1. Database System
2. Conceptual Modelling
3. The Relational Model
4. Relational Algebra and Calculus
5. Structured Query Language
6. Relational Database Design
7. Data Storage and Indexing
8. Query Processing and Optimisation
9. Introduction to Transaction Management
10. Concurrency Control Techniques
11. Database Recovery System
12. Database Security
13. Database System Architectures
14. Data Warehousing, OLAP, and Data Mining
15. Information Retrieval
16. Object-Based Databases
17. XML and updated Appendices
18. Leading Database Systems

About the Author

ITL Education Solution Limited (ITL ESL) is a part of 2000 million ITL group which has operations all over the world with significant presence in computer education and IT-enabled sevices. It specializes in handling IT implementation projects in various IT domains with a dedicated R7D wing of industry experts that helps in designing and developing content.



Database Processing, 13/e

David M. Kroenke • David J. Auer

ISBN: 9789332549951 | © Year: 2015 | Pages: 640

About the Book

Database Processing reflects a new teaching method that gets students straight to the point with its thorough and modern presentation of database processing fundamentals. The thirteenth edition has been thoroughly updated to reflect the latest software.

Features

- Spiral approach to database design. Rather than teach database design once from the data models, this text gives professors a significant pedagogical opportunity to teach database design three times—once from each of the three sources.
- Existing data from spreadsheets, data files, and database extracts.
- The development of new information systems projects.
- The need to redesign an existing database to adapt to changing requirements.
- Early Introduction of SQL. This text provides an early introduction to SQL data manipulation language (DML) SELECT statements. By presenting SQL SELECT statements in Chapter 2, students learn early in the class how to query data and obtain results, seeing firsthand how database technology will be useful to them.
- The Latest Software. This edition has been updated to reflect the latest database software, including Access, SQL Server, and MySQL.
- NEW. Material on big data and the evolving NoSQL movement has been moved to Chapter 12 and expanded upon. Big data is the theme for the chapter. New material on virtualization, cloud computing, and the development of non-relational unstructured data stores (such as Cassandra and HBase) and the Hadoop Distributed File System (HDFS) is also included
- NEW. An independent Case Question set (in each chapter).
- NEW. Microsoft Office 2013. This book has been revised to update all references to Microsoft Access and other Microsoft Office products (e.g., Microsoft Excel) to the recently released Microsoft Office 2013 versions.

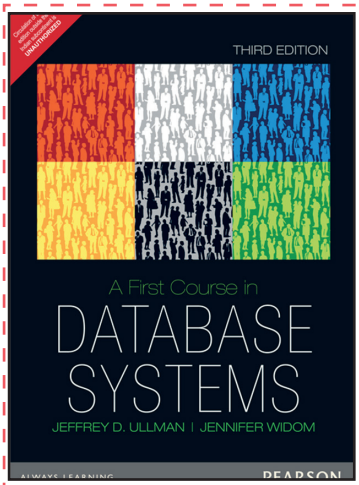
- NEW. Microsoft SQL Server 2012. Although most of the topics covered are backward compatible with Microsoft SQL Server 2008 R2 and Microsoft SQL Server 2008 R2 Express edition, all material in the book now uses SQL Server 2012 in conjunction with Office 2013, exclusively.
- NEW. Oracle MySQL 5.6. The new edition has been updated to include Oracle MySQL 5.6, which is the current generally available (GA) release of MySQL. The authors also now use the MySQL Installer for Windows for installations on computers with the Windows operating system.
- NEW. Big Data and the Not Only SQL movement. Coverage of Big Data and the Not Only SQL movement has been added.
- NEW. Although Oracle's Oracle Database 11g Release 2 remains the version of Oracle Database discussed in the book, all Oracle Database 11g material have been updated to reflect use of the current version of the Oracle SQL Developer GUI tool.

Contents

About the Authors

David M. Kroenke has more than 35 years' experience in the computer industry. He began as a computer programmer for the U.S. Air Force, working both in Los Angeles and at the Pentagon, where he developed one of the world's first DBMS products while part of a team that created a computer simulation of World War III. That simulation served a key role for strategic weapons studies during a 10-year period of the Cold War.

David J. Auer has more than 30 years' experience teaching college-level business and information systems courses and for the past 20 years has worked professionally in the field of information technology. He served as a commissioned officer in the U.S. Air Force, with assignments to NORAD and the Alaskan Air Command in air defense operations. He later taught both business administration and music classes at Whatcom Community College and business courses for the Chapman College Residence Education Center at Whidbey Island Naval Air Station. He was a founder of the Puget Sound Guitar Workshop (now in its 41st year of operations).



A First Course in Database Systems, 3/e

Jeffrey D. Ullman • Jennifer Widom

ISBN: 9789332535206 | © Year: 2014 | Pages: 520

About the Book

Written by well-known computer scientists, this accessible and succinct introduction to database systems focuses on database design and use. The authors provide in-depth coverage of databases from the point of view of the database designer, user, and application programmer, leaving implementation for later courses. It is the first database systems text to cover such topics as UML, algorithms for manipulating dependencies in relations, extended relational algebra, PHP, 3-tier architectures, data cubes, XML, XPATH, XQuery, XSLT.

Features

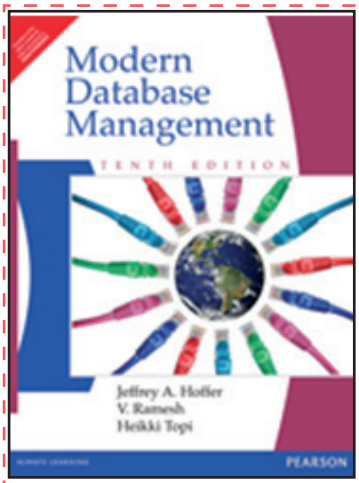
- Large variety of real-world examples ensure the presentation is readable and engaging.
- Extensive treatment of database modeling teaches about this important first step of the planning process.
- Coverage of advanced issues important to database designers and users includes discussions of views, integrity constraints, assertions, triggers, transactions, authorization, and recursion in SQL: 1999.
- Discussion of how to successfully plan a database application before building it reflects how these plans are developed in the real world.
- Extensive exercises in almost every section provide students with the opportunity to practice and apply the concepts they've learned in each chapter.

Contents

About the Authors

Jeffrey D. Ullman is the Stanford W. Ascherman Professor of Computer Science at Stanford University. He is the author of co-author of 15 books and 170 technical publications, including A First Course in Database Systems (Prentice Hall 1997) and Elements of ML Programming (Prentice Hall 1998) His research interests include database theory, database integration, data mining, and education using the information infrastructure.

Jennifer Widom is an Associate Professor in the Computer Science and Electrical Engineering Departments at Stanford University. She has served on numerous editorial boards and program committees, she has published widely in computer science conferences and journals, and is co-author of A First Course in Database Systems



Modern Database Management, 10/e

Jeffrey A. Hoffer • Heikki Topi • V Ramesh

ISBN: 9788131761434 | © Year: 2011 | Pages: 620

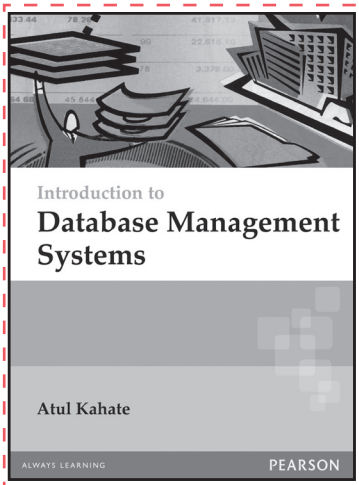
About the Book

The tenth edition of the popular Modern Database Management has been expanded and upgraded to make it more relevant to improved managerial practices, database design tools and methodologies, and database technology. In addition to the expanded coverage of SQL with frequently used components, the text includes new figures to graphically depict the set-processing logic of SQL queries, thereby providing new tools to students.

Features

- A separate chapter on data quality and integration, which are extremely important with national and international regulations such as the Sarbanesâ€"Oxley Act, Basel II, COSI, and HIPAA.
- Specific examples of how to connect to databases from popular programming languages such as Java and VB.NET as well as Web development languages such as Java Server Pages (JSP), ASP.NET, and PHP.
- New and updated field exercises, case studies, and a set of hands-on mini-cases that could be assigned to an individual or to a team.
- The problems and exercises are arranged in an increasing order of difficulty to make it easier for instructors and students to select problems and exercises for practice and assignments.
- Standard data-naming conventions are used throughout the book to make it easier for students to distinguish data elements from conceptual to physical forms.
- New screen captures to reflect the latest database technologies and an updated Web Resources section in each chapter.

Contents



Introduction to Database Management Systems

Atul Kahate

ISBN: 9788131700785 | © Year: 2004 | Pages: 536

About the Book

Designed specifically for a single semester, first course on Database Systems, there are 4 aspects that differentiate our book from the rest.

• *Simplicity*: Normally, the technology of database systems can be quite difficult to understand. There are so many terms, acronyms and buzzwords associated with the technology that people find highly complicated. This book explains each of these with very simple examples, lucid language and a lot of illustrations.

• *Coverage:* The book covers all the essential aspects of database systems, and also covers the areas of RDBMS. There are very few books, which cover all the theory and practice of database systems. This book covers both these aspects.

• *Illustrative approach*: The book contains over 400 diagrams – about one per page. This makes this book unique in terms of its visual approach. With this, even the most difficult concepts become a lot easier to understand.

• *Modern topics*: The book covers all the modern topics, such as OODBMS, database systems and the Internet, Data warehousing, Mobile databases, Multimedia databases, Deductive databases.

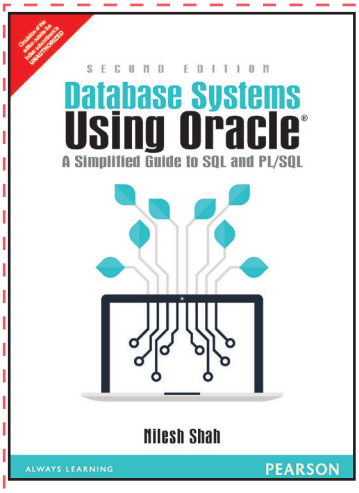
Features

- Detailed coverage of Database models, theory and architectures.
- Focus on Transaction management and Concurrency issues.
- A separate chapter on Database security.
- Coverage of Object technology and OODBMS.
- Distributed databases explained in depth.
- Explanation of Data warehousing, Data mining, and OLAP.
- Liberal use and explanation of SQL.
- Unique appendices on Data Structures, Sorting and Searching, Database Management with Access and Case Studies with real life programs in COBOL, DB2 and C.

Contents

About the Author

Atul Kahate has over 13 Years of experience in the IT industry in varying capacities in India and abroad. Author of 18 highly acclimated text books. Winner of several awards for contribution to IT education and other achievements. Visiting faculty and guest speaker in several reputed educational institutions across the country.



Database Systems Using Oracle, 2/e

Nilesh Shah

ISBN: 9789332549722 | © Year: 2015 | Pages: 456

About the Book

Updated to cover Oracle 9i, this text first introduces students to relational database concepts and database designing techniques, then teaches them how to design and implement accurate and effective database systems. With its subsequent in-depth coverage of SQL (the universal query language for relational databases) and PL/SQL (Oracle's procedural language extension to SQL), this text serves not only as an introductory guide but also as a valuable future reference. Part IV, Advanced Topics, allows students to further understand and utilize Oracle 9i architecture and administration.

Features

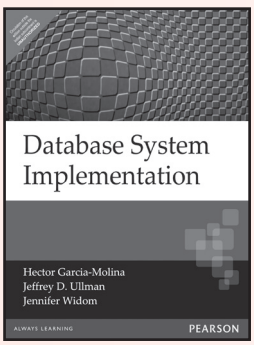
- NEW - Updated material for Oracle 9 i—Introduces the new features of Oracle 9i.
- NEW - More examples—Provided throughout the text; coding examples are replaced by more than 250 actual screen shots.
- NEW - Enhanced material—Provides new and enhanced information all existing topics, including Oracle's data dictionary; and updated ERD.
- NEW - New chapters—Includes Database Administration with Enterprise Manager and a new chapter on database connectivity with Java/C++ and SQLJ.
- NEW - New lesson on SQL*Plus—Includes exercises for SQL workshet and iSQL*Plus environments; these add to the already numerous hands-on exercises and lab activities for each chapter.
- Two sample databases—Used throughout the book as examples and for lab activities; the first is a typical college student's database with demographic, schedule, and registration information; the second is a corporation's employee database with demographic and job-related data.
- Versatility—Covers the SQL and PL/SQL features that work with any version of Oracle.
- SQL Review section—Provides a review of SQL statements covered in chapters 3-9, and includes a sample database.

Contents

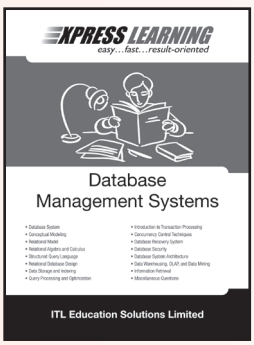
About the Author

Nilesh D. Shah, DeVry College of Technology and Monroe College.

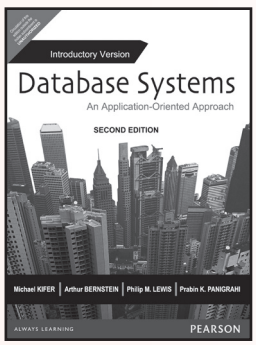
Also Available



ISBN: 9788131704134
Pages: 672

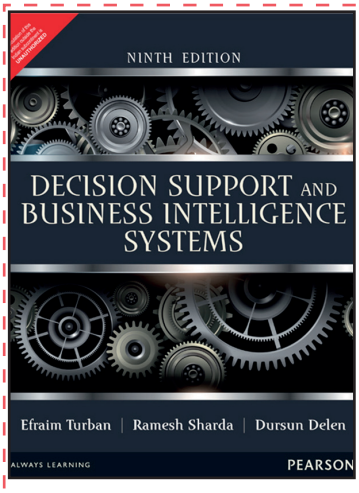


ISBN: 9788131760802
Pages: 672



ISBN: 9788131703748
Pages: 624

ISBN: 9789332526280
Pages: 264



Decision Support and Business Intelligence Systems, 9/e

Efraim Turban • Ramesh Sharda • Dursur Delen

ISBN: 9789332518254 | © Year: 2013 | Pages: 676

About the Book

Appropriate for all courses in Decision Support Systems (DSS), computerized decision making tools, and management support systems.

Decision Support and Business Intelligence Systems, 9e provides the only comprehensive, up-to-date guide to today's revolutionary management support system technologies, and showcases how they can be used for better decision-making.

The 9th edition focuses on Business Intelligence (BI) and analytics for enterprise decision support in a more streamlined book.

Features

- Introduction of management support systems (MSS) technologies.
- BI and analytics for enterprise decision support.
- Extensive supply chain and ERP coverage.
- Comprehensive coverage of data warehousing.
- Comprehensive coverage of knowledge-based decision support.
- Organizational and societal impacts.
- Detailed coverage of implementation and integration.
- Links to Teradata University Network (TUN).
- Software Support.

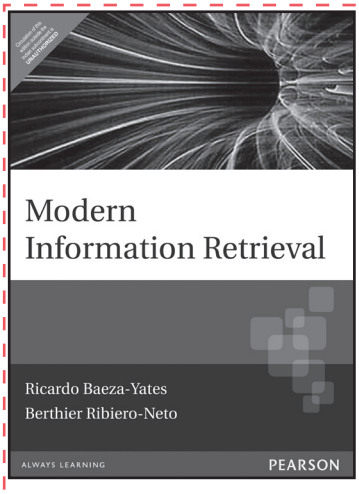
Contents

About the Authors

Efraim Turban Efraim Turban (M.B.A., Ph.D., University of California, Berkeley) is a visiting scholar at the Pacific Institute for Information System Management, University of Hawaii. Prior to this, he was on the staff of several universities, including City University of Hong Kong; Lehigh University; Florida International University; California State University, Long Beach; Eastern Illinois University; and the University of Southern California.

Ramesh Sharda (M.B.A., Ph.D., University of Wisconsin—Madison) is Director of the PhD in Business for Executives Program and Institute for Research in Information Systems (IRIS), ConocoPhillips Chair of Management of Technology, and a Regents Professor of Management Science and Information Systems in the Spears School of Business at Oklahoma State University (OSU).

Dursun Delen (Ph.D, Oklahoma State University) is the Spears and Patterson Chairs in Business Analytics, Director of Research for the Center for Health Systems Innovation and Professor of Management Science and Information Systems in the Spears School of Business at Oklahoma State University (OSU).



Modern Information Retrieval

Ricardo Baeza-Yates • Berthier Ribiero-Neto

ISBN: 9788131709771 | © Year: 2003 | Pages: 534

About the Book

We live in the information age, where swift access to relevant information in whatever form or medium can dictate the success or failure of businesses or individuals. The timely provision of relevant information with minimal 'noise' is critical to modern society and this is what information retrieval (IR) is all about. It is a dynamic subject, with current changes driven by the expansion of the World Wide Web, the advent of modern and inexpensive graphical user interfaces and the development of reliable and low-cost mass storage devices. **Modern Information Retrieval** discusses all these changes in great detail and can be used for a first course on IR as well as graduate courses on the topic. The book comprises two portions which complement and balance each other. The core portion includes nine chapters authored or co-authored by the designers of the book. The second portion, which is fully integrated with the first, is formed by six state-of-the-art chapters written by leading researchers in their fields. From IR models to indexing text, from IR visual tools and interfaces to the Web, from IR. multimedia to digital libraries, the book provides both breadth of coverage and richness of detail. It is our hope that, given the now clear relevance and significance of information retrieval to modern society. The book will contribute to further disseminate the study of the discipline at information science, computer science, and library science departments throughout the world.

Features

- Text IR - all the main IR models, query operations, text operations, indexing and searching (three of them co-authored with Gonzalo Navarro or Nivio Ziviani)
- The Web - challenges, measures and models, search engines, directories, query languages, meta searches and trends
- Parallel and Distributed IR - algorithms and architectures (Eric Brown)
- User Interfaces and Visualization - the main interface paradigms for query formation and visualization of results (Marti A. Hearst)
- Multimedia IR: Models and Languages - including MULTOS and SQL3 (Elisa Bertino, Barbara Catania and Elena Ferrari)
- Multimedia IR: Indexing and Searching - R-trees and GEMINI and QBIC (Christos Faloutsos)
- Libraries and Bibliographical Systems - online systems and public access catalogs (Edie M. Rasmussen)
- Digital Libraries - the main challenges for effective deployment (Edward A Fox and Ohm Sornil)

Contents

About the Authors

Ricardo Baeza-Yates received his Ph.D. in Computer Science from the University of Waterloo, Canada in 1989. In 1992 and 1996, he was elected president of the Chilean Computer Science Society. In 1993, he received the Organization of American States award for young researcher in exact sciences.

Berthier Ribeiro-Neto reveived his Ph.D. in Computer Science from the University of California, Los Angeles in 1995. He is involved with various research projects financed by Braziliam agencies; the two main projects deal with wireless information systems and video on demand. He has chaired distinguished conferences in South America and is a member of ACM, IEEE and ASIS.

Advanced Digital Design with the Verilog HDL, 2e

NEW

Michael D. Ciletti

ISBN: 9789332584464 | © Year: 2017 | Pages: 992

About the Book

For an advanced course in digital design for seniors and first-year graduate students in electrical engineering, computer engineering, and computer science.

This book builds on the student's background from a first course in logic design and focuses on developing, verifying, and synthesizing designs of digital circuits. The Verilog language is introduced in an integrated, but selective manner, only as needed to support design examples (includes appendices for additional language details). It addresses the design of several important circuits used in computer systems, digital signal processing, image processing, and other applications.

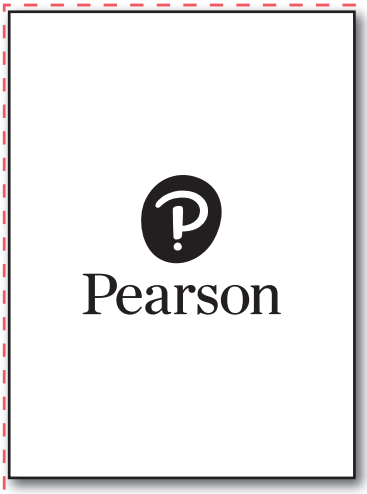
Features

- Provides a brief review of basic principles in combinational and sequential logic.
- Focuses on modern digital design methodology.
- Demonstrates the utility of ASM and ASMD charts for behavioral modeling.
- Clearly distinguishes between synthesizable and nonsynthesizable loops.
- Provides several problems with a wide range of difficulty after each chapter.
- Combines a solution manual with an on-line repository of additional worked exercises.
- Inclusion of an appendix introducing semiconductor technology.

Contents

About the Author

Michael D. Ciletti is Professor Emeritus in the Department of Electrical and Computer Engineering at the University of Colorado, Colorado Springs. His areas of interest include Modeling, synthesis and verification of digital systems with hardware description languages, system-level design languages, and embedded systems with FPGAs.



Digital Fundamentals, 11/e

Thomas L. Floyd

NEW

ISBN: TBA | © Year: 2011 | Pages: 944

About the Book

For courses in digital circuits, digital systems (including design and analysis), digital fundamentals, digital logic, and introduction to computers

Digital Fundamentals, Eleventh Edition, continues its long and respected tradition of offering students a strong foundation in the core fundamentals of digital technology, providing basic concepts reinforced by plentiful illustrations, examples, exercises, and applications.

Features

- Teaching and Learning Experience.
- Provides a strong foundation in the core fundamentals of digital technology.
- Covers basic concepts reinforced by plentiful illustrations, examples, exercises, and applications.
- Provides a strong foundation in the core fundamentals of digital technology.
- Boolean simplification coverage now includes the Quine-McClusky method, and the Expresso method is introduced.
- The chapter on programmable logic has been modified and improved.
- A discussion of memory hierarchy has been added.
- A new chapter on data transmission has been added and includes extensive coverage of standard busses.
- The chapter on computers has been completely revised and is now entitled Data Processing.

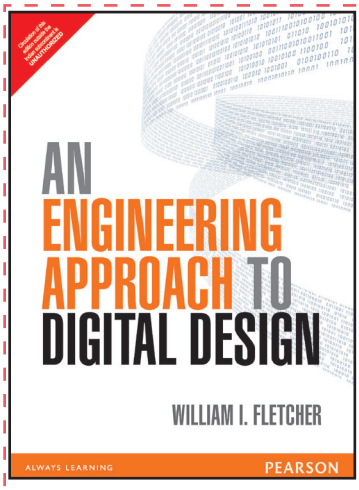
New features for this edition:

- The System Application Activities (formerly Digital System Applications) have been thoroughly revised.
- More end-of-chapter problems.
- A true/false quiz at the end of every chapter.
- Boolean simplification coverage now includes the Quine-McClusky method in an appendix.
- Coverage of the cyclic redundancy code (CRC).
- Introduction to multi-core processors.

Contents

About the Author

Thomas L. Floyd received his BS degree in electrical engineering from the University of Florida in 1964 and began his industrial experience at Texas Instruments Inc. in Dallas, Texas the same year.He also did consulting work for Martin-Marietta during this time. While at VCC, Mr. Floyd wrote his first textbook, Digital Fundamentals, which was published in 1977 and is now in its eleventh edition.



An Engineering Approach to Digital Design

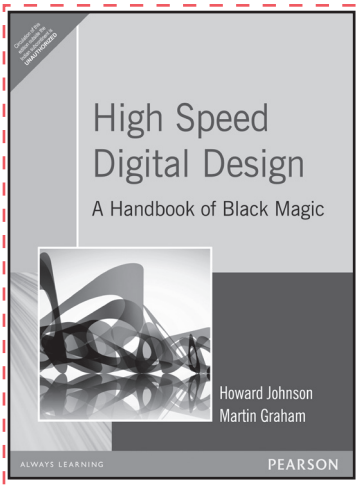
William I. Fletcher

ISBN: 9789332555228 | © Year: 2015 | Pages: 768

About the Book

Providing an engineering-based approach to digital design, this book develops general design methodology (stressing documentation) that is useful for a wide range of diverse applications. The text builds up conceptual understanding through a survey of selected theories and examples. Besides, it also considers the 'how-to' of practical time- efficient design methods (for well-documented reliable and debug-gable hardware) for simple combinational systems, traditional sequential machines, high speed system controllers and programmable finite state machines.

Contents



High Speed Digital Design: A Handbook of Black Magic

Howard Johnson • Martin Graham

ISBN: 9788131714126 | © Year: 2003 | Pages: 464

About the Book

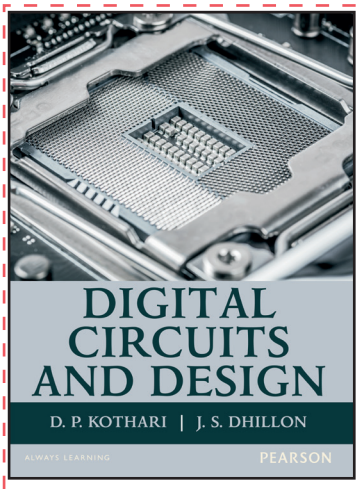
Focusing on a combination of digital and analog circuit theory, this comprehensive volume will help engineers who work with digital systems, shorten their product development cycles, and fix their latest high-speed design problems.

Features

- Covers signal reflection, crosstalk, and noise problems that occur in high-speed digtal machines (above 10 megahertz).
- Includes checklists that ask the questions an experienced designer would about a new system.
- Offers useful formulas for inductance, capacitance, resistance, rise time, and Q.
- Explains the trade-offs between signal cross talk, mechanical fabrication of tolerances, and trace routing density.
- Presents a methodology for determining how many layrs will be required to route a printed circuit board.

Contents

1. Fundamentals
2. High-Speed Properties of Logic Gates
3. Measurement Techniques
4. Transmission Lines
5. Ground Planes and Layer Stacking
6. Terminations
7. Vias
8. Power Systems
9. Connectors
10. Ribbon Cables
11. Clock Distribution
12. Clock Oscillators



Digital Circuits and Design, 1/e

D. P. Kothari, • J. S. Dhillon

ISBN: 9789332543539 | © Year: 2015 | Pages: 1080

About the Book

This student friendly, practical and example-driven book gives students a solid foundation in the basics of digital circuits and design. The fundamental concepts of digital electronics such as analog/digital signals and waveforms, digital information and digital integrated circuits are discussed in detail using relevant pedagogy.

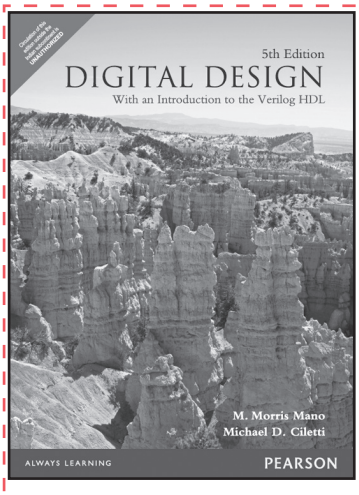
Contents

1. Extensive coverage on
   Counters such as Hybrid, Decade and Presetable
   Edge Triggered Flip Flops
   Hardware Description Languages
   Design of Arithmetic Logic Unit
2. Exclusive chapter on Logic Description Using VHDL
3. Includes topics such as synchronous/asynchronous mode circuits, pulse mode, sequential circuits, VHDL 7 segment decoder, VHDL code converters, etc
4. Additional solve the examples and reading material available online
5. Excellent pedagogy
   300+ Solved Questions
   600+ Unsolved Questions
   250+ MCQs
   35+ VHDL Programs

About the Authors

D. P. Kothari Director Research, GPGI, Nagpur Director-In-Charge, Indian Institute of Technology Delhi Former Vice Chancellor, VIT, Vellore and Former Principal, VNIT, Nagpur.

J. S. Dhillon Professor,Department of Electrical and Instrumentation Engineering Sant Longowal Institute of Engineering and Technology, Punjab.



Digital Design: With an Introduction to Verilog HDL, 5/e

M. Morris Mano • Michael D. Ciletti

ISBN: 9788131794746 | © Year: 2013 | Pages: 499

About the Book

Digital Design, fifth edition is a modern update of the classic authoritative text on digital design. This book teaches the basic concepts of digital design in a clear, accessible manner. The book presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications.

Features

- This edition of Digital Design builds on the previous four editions, and the feedback of the team of reviewers who helped set a direction for the presentation.
- The focus of the text has been sharpened to more closely reflect the content of a foundation course in digital design and the mainstream technology of today's digital systems: CMOS circuits. The intended audience is broad, embracing students of electronics and communication engineering, and electrical engineering.
- The key elements that the book focuses include (1) Boolean logic, (2) logic gates used by designers, (3) synchronous finite state machines, and (4) datapath controller design—all from a perspective of designing digital systems.
- The widespread availability of web-based ancillary material prompted a limitation of the discussion of field programmable gate arrays (FPGAs) to an introduction of devices offered by only one manufacturer, rather than two.
- Today's designers rely heavily on hardware description languages (HDLs), and this edition of the book gives greater attention to their use and presents a clear development of a design methodology using the Verilog HDL.
- Digital Design supports a multimodal approach to learning, following the VARK characterization of learning modalities identifying the four major modes by which humans learn: (V) visual, (A) aural, (R) reading, and (K) kinesthetic.
- The sequence of topics in the text can accommodate courses that adhere to traditional, manual-based, treatments of digital design, courses that treat design using an HDL, and courses that are in transition between or blend the two approaches.

New to this Edition:

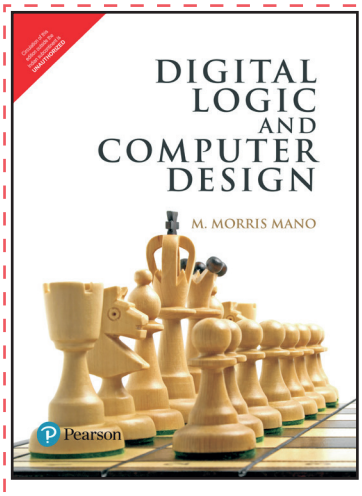
- This edition of Digital Design uses the latest features of IEEE Standard 1364, but only insofar as they support the authors' pedagogical objectives. The revisions and updates to the text include.
- Addition of "Web Search Topics" at the end of each chapter to point students to additional subject matter available on the web.
- Revision of approximately one-third of the problems at end of the chapters.
- Streamlining of the discussion of Karnaugh-maps.
- Integration of treatment of basic CMOS technology with treatment of logic gates.
- Inclusion of an appendix introducing semiconductor technology.

Contents

About the Authors

M. Morris Mano, California State University, Los Angeles.

Micheal D. Ciletti, University of Colorado, Colorado Springs.



Digital Logic and Computer Design

M. Morris Mano

NEW

ISBN: 9789332542525 | © Year: 2016 | Pages: 560

About the Book

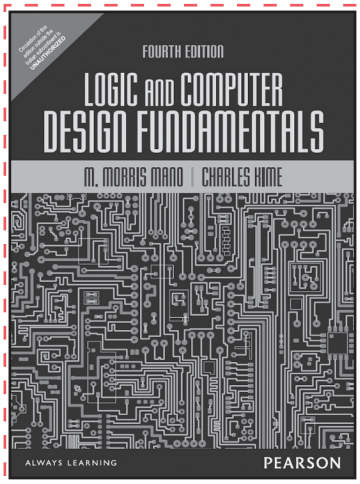
This book presents the basic concepts used in the design and analysis of digital systems and introduces the principles of digital computer organization and design. It discusses various methods and techniques suitable for a variety of digital system design applications and covers all aspects of digital systems. It also includes applications of Read Only Memory (ROM) and Programmable Logic Array (PLA).

Features

- Covers all aspects of digital systems from electronic gate circuits to the complex structure of microprocessor systems.
- Presents the classical techniques for the logic design of combination and sequential circuits.
- Facilitates a thorough understanding of the register-transfer method used for the analysis and design of processor units and control units".

Contents

1. Binary Systems
2. Boolean Algebra and Logic Gates
3. Simplification of Boolean Functions
4. Combinational Logic
5. Combinational Logic with MSI and LSI
6. Sequential Logic
7. Registers, Counters, and the Memory Unit
8. Register-Transfer Logic
9. Processor Logic Design
10. Control Logic Design
11. Computer Design
12. Microcomputer System Design
13. Digital Integrated Circuits



Logic and Computer Design Fundamentals, 4/e

M. Morris Mano • Charles Hime

ISBN: 9789332518728 | © Year:2013 | Pages: 700

About the Book

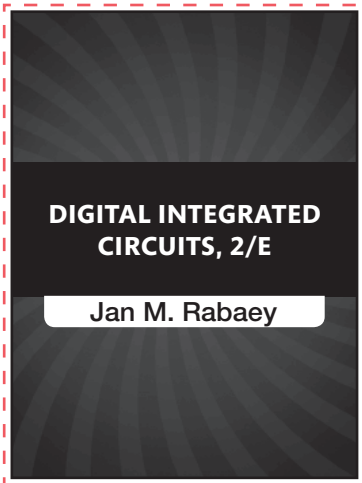
Providing solid digital system design fundamentals while accomplishing a gradual, bottom-up development of these fundamentals, this book focuses on the ever-evolving applications of basic computer design concepts. Treatment of logic design, digital system design, and computer design. Ideal for self-study by engineers and computer scientists.

Features

- NEW—Many new sections on VHDL and Verilog—Includes separate discussions dedicated to VHDL or Verilog on: combinational design; sequential circuits; registers; datapaths; multipliers; and more.
- NEW—125 additional pages on book's website on VHDL and Verilog— Includes additional explanatory material, VHDL and Verilog-based problems, and all source files for VHDL and Verilog examples.
- NEW—40% changed or new problems.
- Exceptionally readable.
- A gradual development of logic, design, digital systems, and computer architecture concepts.

Contents

1. Digital Computers and Information
2. Combinational Logic Circuits
3. Combinational Logic Design
4. Sequential Circuits
5. Registers and Counters
6. Memory and Programmable Logic Devices
7. Register Transfers and Datapaths
8. Sequencing and Control
9. Instruction Set Architecture
10. Central Processing Unit Designs
11. Input-Output and Communication
12. Memory Systems



Digital Integrated Circuits, 2/e

NEW

Jan M. Rabaey

ISBN: 9789332573925 | © Year: 2016 | Pages: 784

About the Book

Progressive in content and form, this text successfully bridges the gap between the circuit perspective and system perspective of digital integrated circuit design. Beginning with solid discussions on the operation of electronic devices and in-depth analysis of the nucleus of digital design, the text maintains a consistent, logical flow of subject matter throughout. The revision addresses today's most significant and compelling industry topics, including: the impact of interconnect, design for low power, issues in timing and clocking, design methodologies, and the tremendous effect of design automation on the digital design perspective. The revision reflects the ongoing evolution in digital integrated circuit design, especially with respect to the impact of moving into the deep-ubmicron realm.

Features

- NEW - Updating of technology of the deep-submicron realm – The piece makes sure that updates to most of the numeric values with respect to advancing processes can be accomplished easily.
- Interconnect material takes a more predominant position and is moved forward in the presentation.
- A number of the circuit techniques have been removed or updated or newer approaches have been introduced – Reflects the changes in design approaches over the last decade.
- A chapter on manufacturing technology has been introduced – Design methodologies are introduced throughout the text in synchronicity with the circuit content.
- Design methodology inserts – Discuss design automation.

Contents

I. The Fabrics

1. Introduction
2. The Manufacturing Process Design Methodology Insert A IC LAYOUT
3. The Devices Design Methodology Insert B Circuit Simulation
4. The Wire

II. A Circuit Perspective

5. The CMOS Inverter
6. Designing Combinational Logic Gates in CMOS Design Methodology Insert C How to Simulate Complex Logic Circuits Design Methodology Insert D Layout Techniques for Complex Gates
7. Designing Sequential Logic Circuits

III. A System Perspective

8. Implementation Strategies for Digital IC Design Methodology Insert E Characterizing Logic and Sequential Cells Design Methodology Insert F Design Synthesis
9. Coping with Interconnect
10. Timing Issues in Digital Circuits Design Methodology Insert G Design Verification
11. Designing Arithmetic Building Blocks
12. Designing Memory and Array Structures Design Methodology Insert H Validation and Test of Manufactured Circuits Problem Solutions

About the Authors

Jan M. Rabaey, University of California, Berkeley

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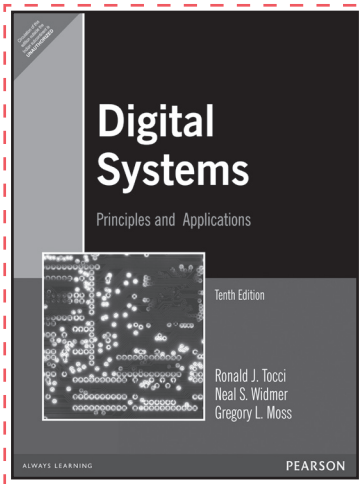
Borivoje Nikolic, University of California, Berkeley.



Digital Systems Principles and Applications, 10/e

Ronald J. Tocci • Neal S. Widmer • Gregory L. Moss

ISBN: 9788131727249 | © Year: 2009 | Pages: 599

About the Book

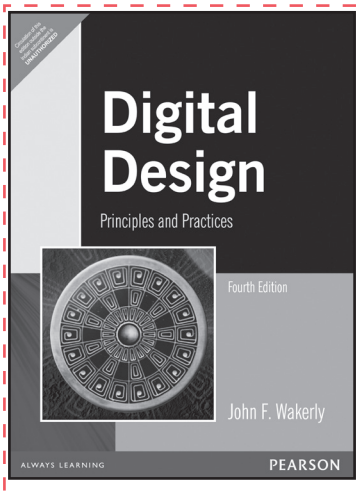
For this new edition, the authors have meticulously worked to provide the right balance between existing and new material while keeping the size of the book within reason. This is a growing challenge due to revolutionary digital technology. Industry's movement from using schematics to using hardware description language (HDLs) to describe complex digital systems has rendered obsolete many topics previously considered to be foundational. In addition, new technology demands the expansion and emphasis of other traditional concepts as it introduces many new tools and techniques for developing and analyzing digital systems.

Features

- Improved analysis of combinational circuits.
- Expanded coverage of the 555 timer in Chapter 5.
- Improved coverage of signed number in Chapter 6.
- Greater emphasis on the synchronous counters in Chapter 7.
- More thorough coverage of state machines, with a practical example of a functional system.
- Description of recent IC technology in Chapter 8.
- Revised and improved VHDL coverage.

Contents

1. Introductory Concepts
2. Number Systems and Codes
3. Describing Logic Circuits
4. Combinational Logic Circuits
5. Flip-Flops and their Applications
6. Digital Arithmetic: Operations and Circuits
7. Counters and Registers
8. Integrated-Circuit Logic Families
9. MSI Logic Circuits
10. Interfacing with the Analog World
11. Memory Devices
12. Logic Circuits Description Using V DL
13. Programmable Logic Device Architectures
14. Digital System Projects Using VHDL



Digital Design: Principles and Practices, 4/e

John F. Wakerly

ISBN: 9788131713662 | ©: 2008 | Pages: 852

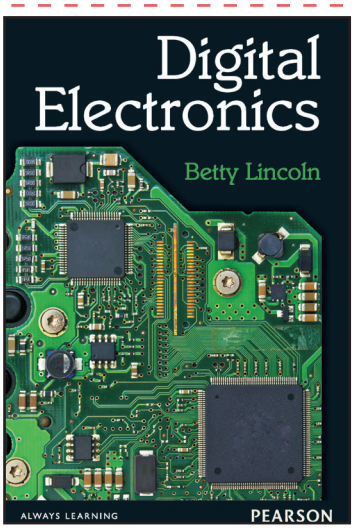
About the Book

Blends academic precision and practical experience in an authoritative introduction to basic principles of digital design and practical requirements. With over 30 years of experience in both industrial and university settings, the author covers the most widespread logic design practices while building a solid foundation of theoretical and engineering principles for students to use as they go forward in this fast moving field.

Features

- Now covers all popular HDLs (hardware descrioption languages) Verilog as well as ABEL and VHDL.
- Multi-chip design examples are redone in terms of VHDL and Verilog programs, instead of interconnected MSI chips and glue logic.
- 50% new exercises.

Contents



Digital Electronics

Betty Lincoln

ISBN: 9789332522299 | © Year: 2014 | Pages: 448

About the Book

Digital Electronics is a course offered for undergraduate computer science students during the first or second semesters. This textbook provides a fundamental insight to the basic concepts of electronics with adequate examples and illustrations. Spread across sixteen chapters, the book provides a solid introduction to digital systems, number systems, logic gates, Boolean algebra and Karnaugh mapping and then dwells into key topics of logic implementation, integrated circuits interfacing, logic circuits, registers, counters, convertors and display devices. A separate chapter is allotted for electronic experiments. Supported with numerous examples and exercises this textbook is an ideal classroom companion for students.

Features

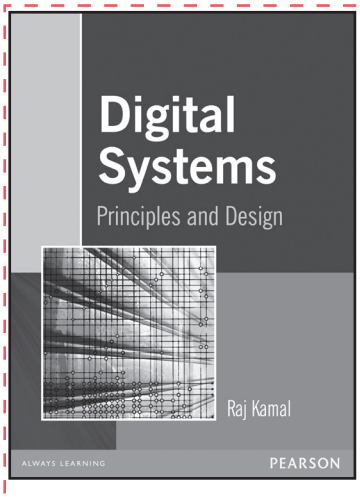
- Indepth coverage of logic gates and Boolean algebra.
- Includes topics under display devices, memory storage devices and flip flops.
- Over 150 solved examples.
- Over 200 multiple choice questions.
- Over 300 end of chapter exercises.

Contents

1. Digital Systems
2. Numbering Systems
3. Logic Gates
4. Boolean Algebra
5. Karnaugh Mapping
6. Implementation of universal gates
7. Integrated circuits and logic families
8. Combinational logic circuits
9. Flip Flops
10. Registers
11. Counters
12. Memory
13. Display devices
14. Converters
15. Computer fundamentals
16. Electronics exercises

About the Author

Betty Lincoln, Sri Ramachandra University, Chennai



Digital Systems: Principles and Design

Raj Kamal

ISBN: 9788177585704 | © Year: 2006 | Pages: 544

About the Book

Digital Systems is designed as an essential textbook for students of electronics and communication engineering, electrical engineering, instrumentation engineering, information technology and computer engineering. It provides students with a solid foundation of digital fundamentals through worked-out examples and facilitates a firm understanding of the subject.

Features

- Illustrates the functioning of circuits using truth tables, state tables, timing diagrams and state diagrams.
- Includes advanced topics like the Quine–McCluskey method, computer-based minimization techniques, synchronous and asynchronous mode circuits, fundamental-mode circuit analysis, pulse-mode sequential circuits, and FPGAs.
- Each chapter focuses on a single aspect of digital systems and highlights areas for the student to keep in mind.
- Contains over 200 diagrams, 250 worked-out examples, and a large number of problems for practice.

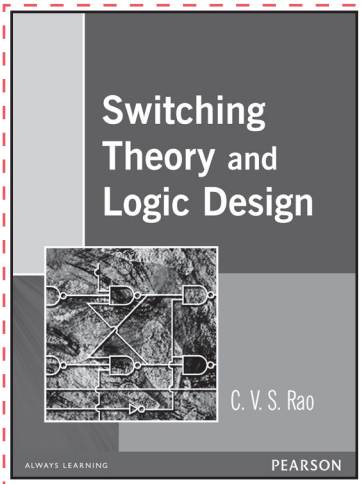
Contents

1. Basic Digital Concepts
2. Number Systems
3. Binary Arithmetic and Two's Complement Arithmetic
4. Boolean Algebra and Theorems, Minterms and Maxterms
5. Karnaugh Map and Minimization Procedures
6. Logic Gates
7. Interfacing Circuits between the Logic Gates of Same Family, Different Families and Types
8. Open Collector, Open Drain and Tristate Gates
9. Problem Formulation and Design of the Combinational Circuits
10. Binary Arithmetic and Decoding and Mux Logic Units
11. Code Converters, Comparators and Other Logic Processing Circuits
12. Implementation of Combinational Logic by Standard ICs and Programmable ROM Memories
13. Implementation of Combinational Logic by Programmable Logic Devices
14. Sequential Logic, Latches and Flip-Flops
15. Sequential Circuits Analysis, State-Minimization, State-Assignment and Circuit Implementation
16. Sequential Circuits for Registers and Counters

17. RAM, Address and Data Buses, Memory Decoding, Semiconductor Memories
18. Fundamental Mode Sequential Circuits
19. Hazards and Pulse Mode Sequential Circuits
20. ADC, DAC and Analog-Digital Mix Interfaces
21. CPLDs and FPGAs

About the Author

Raj Kamal received his M.Sc. at the age of 17, published his first research paper in an international journal at 18 and completed his Ph.D. at 22. With over 34 years of teaching and research experience, he has guided nine Ph.D.s, published eight books, and written over 80 research papers for international and national journals. He is the best-selling author of Microcontrollers, also published by Pearson Education.



Switching Theory and Logic Design

C.V.S. Rao

ISBN: 9788131701836 | © Year: 2005 | Pages: 336

About the Book

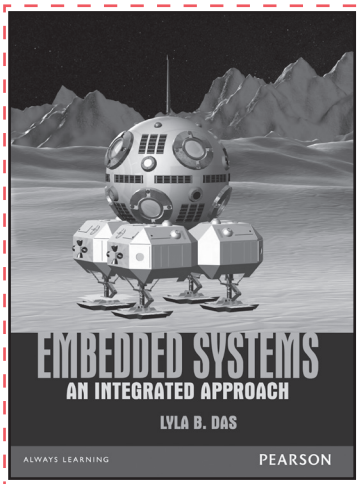
Switching Theory and Logic Design is for a first level introductory course on digital logic design. This book illustrates the usefulness of switching theory and its applications, with examples to acquaint the student with necessary background. This book has designed as a prerequisite to many other courses like Digital Integrated Circuits, Computer Organisation, Digital Instrumentation, Digital Control, Digital Communications, Hardware Description Languages and so on.

Features

- Combinational logic circuit design covered in detail.
- Different types of flip-flops and their conversion from one to the other is explained.
- Utility of the ASM charts in designing the control unit of digit system is emphasized.
- Chapter Objectives, Summary, and Key Terms are provided in each chapter.
- Simple and lucid style of writing.
- Rich in pedagogy with large number of illustrations.

Contents

1. Introduction and Number Systems
2. Boolean Algebra
3. Minimisation of Switching Functions
4. Design of Combinational Circuits
5. Threshold Logic and Symmetric Functions
6. Flip-Flops as Memory Elements
7. Synchronous Sequential Circuits
8. Asynchronous Sequential Circuits
9. Minimisation of Sequential Machines
10. Algorithmic State Machine Charts



Embedded Systems: An Integrated Approach

Lyla B. Das

ISBN: 9788131787663 | © Year: 2012 | Pages: 784

About The Book

Embedded Systems—An Integrated Approach is exclusively designed for the undergraduate courses in electronics and communication engineering as well as computer science engineering. This book is well-structured and covers all the important processors and their applications in a sequential manner. It begins with a highlight on the building blocks of the embedded systems, moves on to discuss the software aspects and new processors and finally concludes with an insightful study of important applications. This book also contains an entire part dedicated to the ARM processor, its software requirements and the programming languages. Relevant case studies and examples supplement the main discussions in the text.

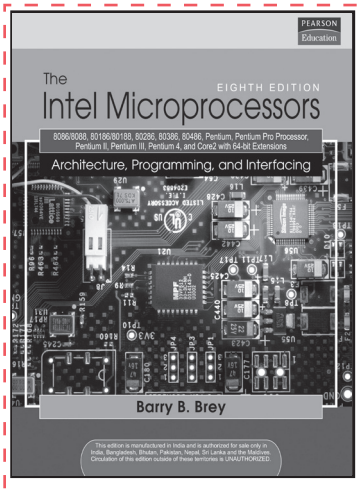
Features

- Extensive coverage on the embedded hardware including details of processors, sensors, actuators, buses and system development.
- Comprehensive discussion on the architecture and programming of the ARM, 8051 and PSoC microcontrollers.
- Analysis on the concepts of operating systems with a special emphasis on the real time operating systems.
- Step-by-step solutions provided for programming examples in Assembly and C.
- Detailed coverage on DSP processors, ASIC design, product life-cycle management and software development tools.
- An entire chapter on the important applications of the embedded systems.

Contents

About the Author

Lyla B. Das is Associate Professor, Department of Electronics and Communication Engineering, National Institute of Technology-Calicut, Kozhikode, Kerala.



The Intel Microprocessors, 8/e

Barry B. Brey

ISBN: 9788131726228 | © Year: 2008 | Pages: 944

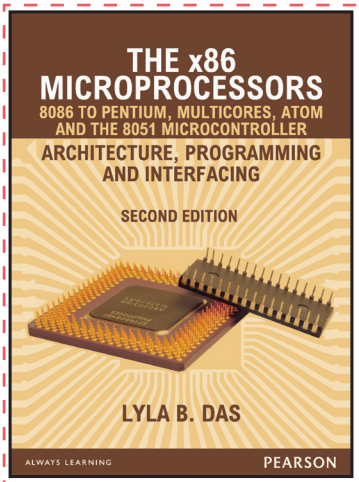
About the Book

The Intel Microprocessors: 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, Pentium Pro Processor, Pentium II, Pentium III, Pentium 4, and Core2 with 64-bit Extensions, 8/e, provides a comprehensive view of programming and interfacing of the Intel family of Microprocessors from the 8088 through the latest Pentium 4 and Core2 microprocessors. The text is written for students who need to learn about the programming and interfacing of Intel microprocessors, which have gained wide and at times exclusive application in many areas of electronics, communications, and control systems, particularly in desktop computer systems. Many applications include Visual C++ as a basis for learning assembly language using the inline assembler. Organized in an orderly and manageable format, this text offers more than 200 programming examples using the Microsoft Macro Assembler program and provides a thorough description of each of the Intel family members, memory systems, and various I/O systems.

Features

- Illustrated concepts for students with relevant programming examples, many written in Visual C++ with embedded assembly language code.
- Coverage of how to develop software to control application interfaces to the microprocessor.
- Coverage of how to program the microprocessor using the popular Microsoft Visual C programming environment with embedded assembly language to control personal computers.
- Descriptions of how to use real mode (DOS) and protected mode (Windows) of the microprocessor.
- Explanation of the operation of a real-time operating system (RTOS) in an embedded environment.

Contents



The x86 Microprocessor: Architecture, Programming and Interfacing, 2/e

Lyla B. Das

ISBN: 9789332536821 | © Year: 2014 | Pages: 888

About the Book

The book is designed for an undergraduate course on 16-bit microprocessor and Pentium. The text comprehensively covers both the hardware and software aspects of the subject with equal emphasis on architecture, programming and interfacing. The book gives an introduction to 8051 Microcontroller and its applications.

Features

- Comprehensive analysis of programming and interfacing of 8086, with practical examples.
- Discusses the features and enhancements of the 80386, 80486 and Pentium processors.

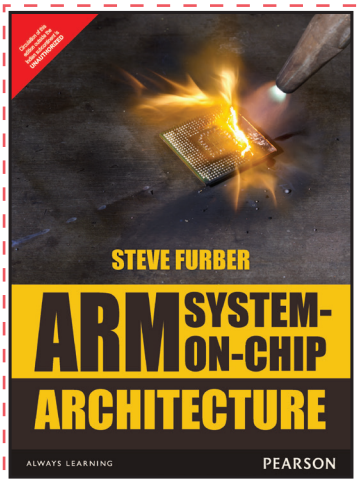
New to the Second edition

- Architecture of Intel's advanced Atom SoC processor is explained in detail.
- 8051 Microcontroller – architecture, interfacing and applications is covered.

Contents

About the Author

Lyla B. Das is Associate Professor, Department of Electronics and Communication Engineering, National Institute of Technology Calicut, Kozhikode, KeralaARM.



ARM System-on-Chip Architecture

Steve Furber

ISBN: 9789332555570 | © Year: 2016 | Pages: 432

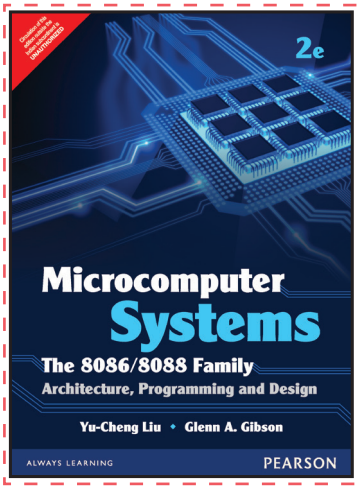
About the Book

ARM System-on-Chip Architecture presents and discusses the major issues of system-on-chip design, including memory hierarchy, caches, memory management, on-chip buses, on-chip debug and production tests. It provides an overview of the ARM processor family, enabling the reader to decide which ARM is best for the job in hand, describes the ARM and Thumb programming models enabling the designer to begin to develop applications. It also covers all the latest ARM products and developments, including StrongARM, the ARM9 and ARM10 series of cores, and the ARM-based SoC components at the heart of Ericsson's Bluetooth technology, the Psion Series 5 PDA and Samsung's SGH2400 GSM handset. It includes details on the AMULET asynchronous ARM cores and the AMULET3H asynchronous SoC subsystem. ARM System-on-Chip Architecture is an essential handbook for system-on-chip designers using ARM processor cores and engineers working with the ARM. It can also be used as a course text for undergraduate and master's students of computer science, computer engineering and electrical engineering.

Contents

About the Author

Steve Furber has a long association with the ARM, having helped create the first ARM chips during the 1980s. Now an academic, but still actively involved in ARM development, he presents an authoritative perspective on the many complex factors that influence the design of a modern system-on-chip and the microprocessor core that is at its heart. This book represents the culmination of fifteen years of experience of ARM research and development and of teaching undergraduate, masters and industrial training courses in system-on-chip design using the ARM.



Microcomputer Systems: The 8086/8088 Family Architecture, Programming and Design, 2/e

Yu-Cheng Liu • Glenn A. Gibson

ISBN: 9789332550087 | © Year: 2015 | Pages: 640

About the Book

A comprehensive exploration of both the software and hardware for 6-bit microprocessors using the Intel 8086/8088 family — and their supporting devices.

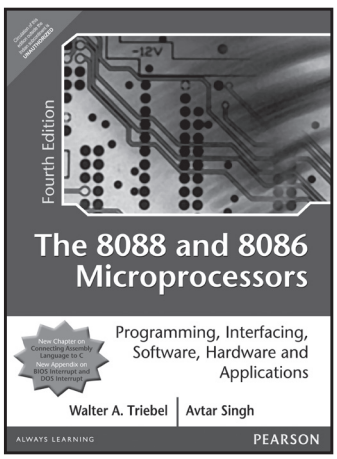
Features

- Gives readers a working knowledge of programming and designing 8086/8088-based microcomputer systems through an abundance of examples.
- Covers the 8089 I/O processor, the 8087 numeric data processor, and how they can be integrated into an 8086/8088 based system.
- Introduces the special features of 80130, 80186, and 80286.
- Includes more than 390 flowcharts, programming examples, logic diagrams, tables, and other illustrations.

Contents

1. Introduction
2. 8086 Architecture
3. Assembler Language Programming
4. Modular Programming
5. Byte and String Manipulation
6. I/O Programming
7. Introduction to Multiprogramming
8. System Bus Structure
9. I/O Interfaces
10. Semiconductor Memory
11. Multiprocessor Configuration
12. VLSI Processing and Supporting Devices
13. The 80286/80287

Appendix: 8086/8088 Instruction Set



The 8088 and 8086 Microprocessors: Programming, Interfacing, Software,Hardware and Applications, 4/e

Walter A. Triebel • Avtar Singh

ISBN: 9788177584813 | © Year: 2007 | Pages: 864

About the Book

Future designers of microprocessor-based electronic equipment require a systems-level understanding of the 80x86 microcomputer. This widely acclaimed edition provides balanced and comprehensive coverage of both the software and hardware of the 8088 and 8086 microprocessors. The book examines how to assemble, run, and debug programs, and how to build, test, and troubleshoot interface circuits. New material has been added on number-system conversations, binary arithmetic, and combinational logic operations.

Features

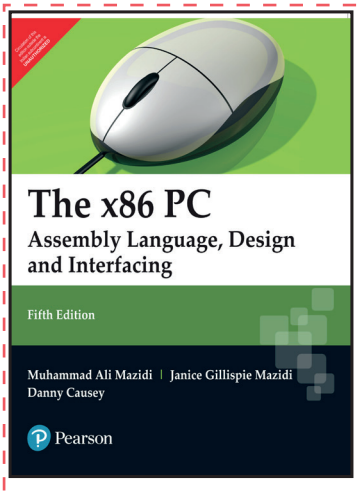
Part I explores the software architecture and how to write, execute, and debug assembly language programs.

Part II examines the hardware architecture of microcomputers built with the 8088 and 8086 microprocessors.

Part III provides detailed coverage of the other microprocessors in the 80x86 family: the 80286, 80486, and Pentium® processors. The newest Pentium ® family – Pentium® III and Pentium® IV – are also examined.

Contents

1. Introduction to Microprocessors and Microcomputers
2. Software Architecture of the 8088 and 8086 Microprocessors
3. Assembly Language Programming
4. Machine Language Coding and the Debug Software Development Program of the PC
5. 8088/8086 Programming—Integer Instructions and Computations
6. 8088/8086 Programming—Control Flow Instructions and Program Structures
7. Assembly Language Program Development with MASM
8. The 8088 and 8086 Pin Configuration and their Memory and Input/Output Interfaces
9. Memory Devices, Circuits, and Subsystem Design
10. Input/Output Interface Circuits and LSI Peripheral Devices
11. Interrupt Interface of the 8088 and 8086 Microprocessors
12. Real-Mode Software and Hardware Architecture of the 80286 Microprocessor
13. The 80386, 80486, and Pentium® Processor Families: Software Architecture
14. The 80386, 80486, and Pentium® Processor Families: Hardware Architecture
15. Connecting Assembly Language To C



The X86 PC: Assembly Language, Design, And Interfacing, 5/e

Muhammad Ali Mazidi • Danny Causey • Janice Gillispie Mazidi

ISBN: 9789332584044 | © Year: 2010 | Pages: 864

About the Book

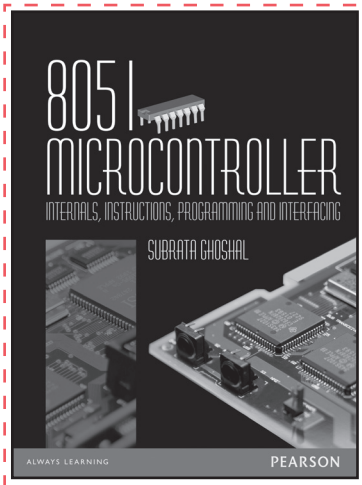
Praised by experts for its clarity and topical breadth, this visually appealing, comprehensive source on PCs uses an easy-to-understand, step-by-step approach to teaching the fundamentals of 80x86 assembly language programming and PC architecture. This edition has been updated to include coverage of the latest 64-bit microprocessor from Intel and AMD, the multi core features of the new 64-bit microprocessors, and programming devices via USB ports.

Offering students a fun, hands-on learning experience, the text uses the Debug utility to show what action the instruction performs, then provides a sample program to show its application. Reinforcing concepts with numerous examples and review questions, its oversized pages delve into dozens of related subjects, including DOS memory map, BIOS, microprocessor architecture, supporting chips, buses, interfacing techniques, system programming, memory hierarchy, DOS memory management, tables of instruction timings, hard disk characteristics, and more.

Features

- Comprehensive coverage of all the 80x86 microprocessors, from the 8088 to the Pentium Pro.
- Combines assembly and C programming early on.
- Introduces the 80x86 instructions with examples of how they are used, and covers 8-bit, 16-bit and 32-bit programming of x86 microprocessors.
- Uses fragments of programs from IBM PC technical reference, showing students a real-world approach to programming in assembly.
- Ensures a basic understanding of binary and hex numbering systems (before delving into PC assembly language and system programming).
- Places all C programming in the last section of each chapter, which maintains continuity for those with no C programming experience.
- Analyzes hardware differences among 8086, 286, 386, 486, Pentium and Pentium Pro chips -- looks at the internal architecture on programming such chips.

Contents



8051 Microcontroller: Internals, Instructions, Programming and Interfacing

Subrata Ghoshal

ISBN: 9789332535756 | © Year: 2014 | Pages: 536

About The Book

For every PC there are at least 20 embedded systems, and the number is increasing. 8051 is one of the most widely used microcontrollers in embedded system design, and its internal architecture, instruction set and interfacing techniques are presented in this book through simple language, excellent graphical annotations and a large variety of solved examples. Spread across 26 chapters, this book starts with the internal architecture of 8051, and then explains all instructions with examples of applications. In-depth discussions on interrupt-handling features are followed by the techniques of interfacing 8051 with the external world through different types of motors, relays, sensors, ADC/DACs, memory devices, keyboards, displays, etc. As most of the embedded systems are battery-powered, power-saving schemes play a major role in considerations of these system designs. Hence, an entire chapter is devoted to explaining power management using 8051. One full-length design example explaining both hardware as well as software aspects of a home protection system using 8051 is presented as a case study. Discussions are concluded by a chapter on advanced microcontrollers such as the AVR.

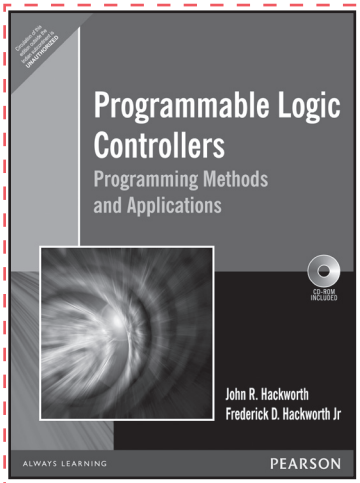
Features

- Three chapters devoted exclusively to solved examples.
- Simpler modules with graphical explanations for complex concepts like I/O port structure or interrupt handling for easier understanding.
- Pictorial representation of most 8051 instructions.
- Extensive comment statements in example programs for better understanding of the program-logic.
- Separate chapters on servo motor interfacing with laboratory experiments.
- Checklists for software developers to ensure zero-error subroutines.
- Examples of programming 8051 in C language.
- A total of 780 questions spread evenly over 26 chapters, with 30 questions at the end of every chapter.

Contents

About the Author

Subrata Ghoshal was a professor of the Department of Embedded System Design, IIIT Pune. He obtained his Ph.D from IIT Bombay. He was Professor and Head of the IT department at the Sikkim Manipal Institite of Technology, and Professor of Computer Science department of St Thomas' College of Engineering and Technology, Kolkata. He has also served as an associate professor at BITS, Pilani, Rajasthan.



Programmable Logic Controllers: Programming Methods and Applications

John R. Hackworth • Frederick D. Hackworth Jr

ISBN: 9788177587715 | © Year: 2003 | Pages: 318

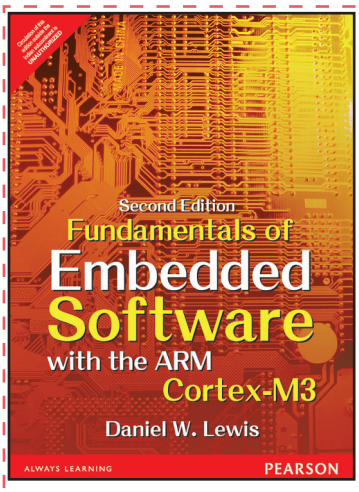
About The Book

For courses in PLC Fundamentals, Advanced PLC Programming and Automation. This volume is designed to help readers develop a good general working knowledge of programmable controllers with concentration on relay ladder logic techniques and how a PLC is connected to external components in an operating control system. The text uses real world programming problems that students can solve on any available programmable controller or PLC simulator. Later chapters relate to more advanced subjects in machine controls, which makes this a welcome addition to a personal technical reference library.

Features

- General coverage of PLC programming.
- Specific programming examples relating to Logic State Machines and Logic Gates.
- Broad coverage of off-the-shelf sensor technology.
- Interfacing external inputs and outputs to PLCs; techniques are simplified and easy-to-understand.
- System integrity and safety emphasis.

Contents



Fundamentals of Embedded Software with the ARM Cortex-M3, 2/e

Daniel W. Lewis

ISBN: 9789332549937 | © Year: 2015 | Pages: 256

About The Book

This book is intended to provide a highly motivating context in which to learn procedural programming languages. The ultimate goal of this text is to lay a foundation that supports the multi-threaded style of programming and high-reliability requirements of embedded software. It presents assembly the way it is most commonly used in practice - to implement small, fast, or special-purpose routines called from a main program written in a high-level language such as C. Students not only learn that assembly still has an important role to play, but their discovery of multi-threaded programming, preemptive and non-preemptive systems, shared resources, and scheduling helps sustain their interest, feeds their curiosity, and strengthens their preparation for subsequent courses on operating systems, real-time systems, networking, and microprocessor-based design.

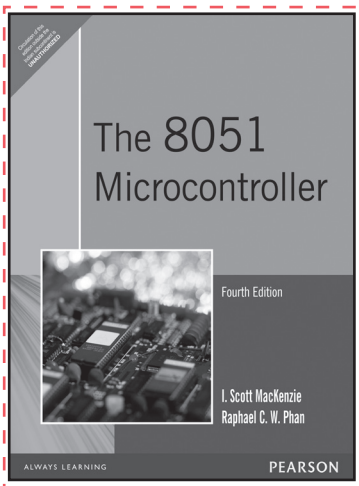
Features

- An alternative to a more traditional course on assembly language programming. This text is intended to serve as the basis for a sophomore level course in a computer science, computer engineering, or electrical engineering curriculum. This course is envisioned as a replacement for the traditional course on computer organization and assembly language programming.
- Presents assembly the way it is most commonly used in practice - to implement small, fast, or special-purpose routines called from a main program written in a high-level language such as C. This approach affords time within both the text and the course to cover assembly in the context of embedded software.
- Allows instructors to easily introduce embedded systems into an already packed curriculum, and provides a way to cover the procedural style still necessary in some upper-division courses.
- Emphasizes those features of C that are employed more frequently in embedded applications, and introduces the procedural style through examples and programming assignments that include large amounts of pre-written source code.
- Programming Assignments and the Companion Web Site. The text is complemented by a collection of programming assignments described in the appendices. Most of the source code for each assignment is provided on the Web Site.

Contents

About the Author

Dr. Daniel W. Lewis efforts led to the creation of Santa Clara University's Computer Engineering department in 1988, providing its leadership for the first 18 years. During his tenure, Lewis established unique co-op and study abroad options that fit within the normal undergraduate four-year plan, the first graduate-level academic certificate programs for working professionals, a new interdisciplinary major in Web Design and Engineering, and a interdisciplinary minor in Information Technology and Society. Since 2004, Lewis has focused on K-12 outreach in engineering and computing, raising more than $1.7M from NSF and private sources, and providing professional development for more than 200 K-12 teachers and summer camps for more than 2,000 K-12 students.



The 8051 Microcontroller, 4/e

I. Scott MacKenzie • Raphael C. W. Phan

ISBN: 9788131720189 | © Year: 2008 | Pages: 560

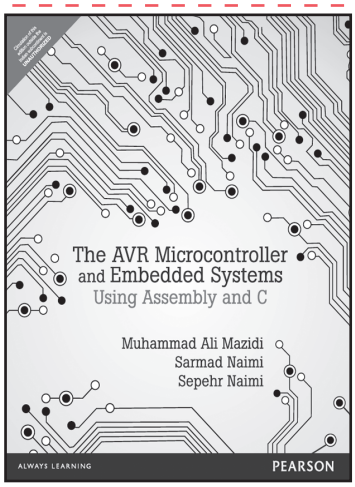
About The Book

MacKenzie's 8051 Microcontroller text emphasizes the programming of the 8051 by illustrating the two most widely used programming methods; Assembly Language and C programming. This text assumes no prior knowledge of the subject and progressively introduces 8051 Microcontroller concepts while reinforcing those concepts with plenty of examples and exercise.

Features

- Treatment of smart cards and data security.
- It covers timer operation, serial port operation, interrupt operation, assembly language programming, 8051 C programming, program structure and design, and tools and techniques for program development.
- Concise treatment of all features of the 8051 microcontroller.
- Comprehensive coding and design examples.

Contents



The AVR Microcontroller and Embedded Systems: Using Assembly and C

Muhammad Ali Mazidi • Sarmad Naimi • Sepehr Naimi

ISBN:9789332518407 | © Year: 2013 | Pages: 700

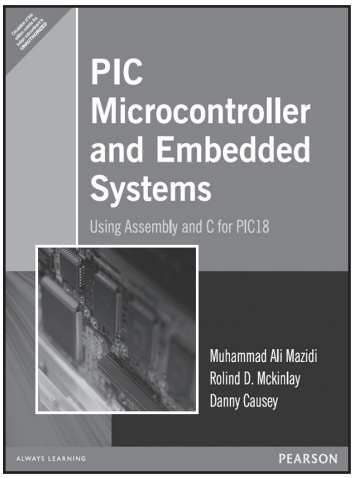
About The Book

The AVR Microcontroller and Embedded Systems: Using Assembly and C features a step-by-step approach in covering both Assembly and C language programming of the AVR family of Microcontrollers. It offers a systematic approach in programming and interfacing of the AVR with LCD, keyboard, ADC, DAC, Sensors, Serial Ports, Timers, DC and Stepper Motors, Opto-isolators, and RTC. Both Assembly and C languages are used in all the peripherals programming. In the first 6 chapters, Assembly language is used to cover the AVR architecture and starting with chapter 7, both Assembly and C languages are used to show the peripherals programming and interfacing.

Features

- Uses a step-by-step approach in covering the Architecture, Registers, and Assembly language programming of the AVR and emphasizes the use of I/O ports programming in Assembly language throughout.
- It covers The AVR C Programming with many examples and emphasizes the use of I/O ports programming in C language.
- There is a chapter for each of the Peripherals of Timer, LCD, ADC, Motors, and RTC.
- Appendix dedicated to the detail description of the AVR instructions with many examples.

Contents



PIC Microcontroller and Embedded Systems: Using assembly and C for PIC 18

Muhammad Ali Mazidi • Rolind D. McKinlay • Danny Causey

ISBN: 9788131716755 | © Year: 2008 | Pages: 800

About The Book

PIC Microcontroller and Embedded Systems offers a systematic approach to PIC programming and interfacing using the Assembly and C languages. Offering numerous examples and a step-by-step approach, it covers both the Assembly and C programming languages and devotes separate chapters to interfacing with peripherals such as timers, LCDs, serial ports, interrupts, motors and more. A unique chapter on the hardware design of the PIC system and the PIC trainer round out coverage, while text appendices and online support make it easy to use in the lab and classroom.

Features

- Systematic coverage of the PIC18 family of microcontrollers.
- Coverage of C language programming of the PIC18- starting from Chapter 7.
- Chapters (9-17) on programming and interfacing the PIC with peripherals.
- An entire chapter (Chapter 8) dedicated to the design of the PIC Trainer.

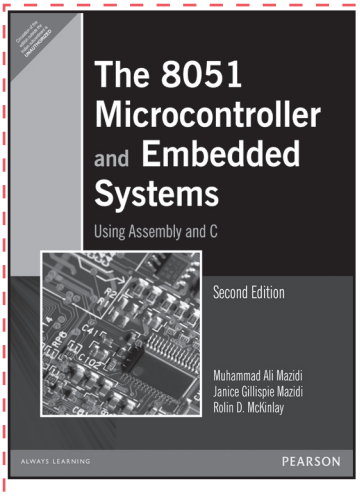
Contents

About the Authors

Muhammad Ali Mazidi holds Master's degrees from both Southern Methodist University and the University of Texas at Dallas. He is currently a.b.d. on his Ph.D. in the Electrical Engineering Department of Southern Methodist University. He teaches microprocessor-based system design at DeVry University in Dallas, Texas.

Rolin Mckinlay has a BSEET from DeVry University. He is currently working on his Master's degree and PE license in the state of Texas. He is currently self-employed as a programmer and circuit board designer, and is a partner in MicroDigitalEd.com

Danny Causey graduated from CET department of De Vry University.His areas of interest include networking, game development, microcontroller and embedded system design.



The 8051 Microcontroller and Embedded Systems Using Assembly and C, 2/e

Muhammad Ali Mazidi • Janice Gillispie Mazidi • Rolin D. McKinlay

ISBN: 9788131710265 | © Year: 2007 | Pages: 560

About The Book

This textbook covers the hardware and software features of the 8051 in a systematic manner.Using Assembly language programming in the first six chapters, in Provides readers with an in-depth understanding of the 8051 architecture.From Chapter 7, this book uses both Assembly and C to Show the 8051 interfacing with real-world devices such as LCDs, keyboards, ADCs, sensors, real-time-clocks, and the DC and Stepper motors, The use of a large number of examples helps the reader to gain mastery of the topic rapidly and move on to the topic of embedded systems project design.

Features

- A new chapter on 8051 C programming.
- A new section on the 8051 C programming of timers.
- A new section on the second serial port of the DS89C4x0 chip.
- A new section on the 8051 C programming of the second serial port.
- A new section on the 8051 C programming of interrupts.
- Programming of the 1KB SRAM of the DS89C4x0 chip.
- A new section on the 8051 C programming of external memory.
- A new chapter on the DS12887 RTC (real-time clock) chip.
- A new chapter on motors, relays, and optoisolators.

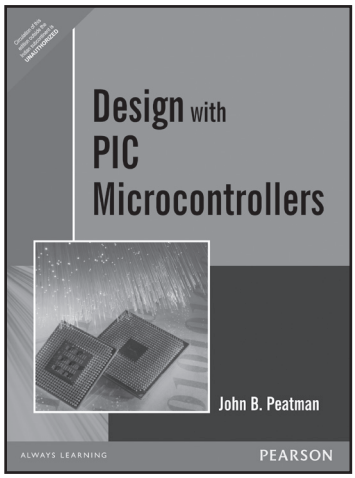
Contents

About the Authors

Muhammad Ali Mazidi went to Tabriz University and holds Master's degrees from both Southern Methodist University and the University of Texas at Dallas. He is currently a.b.d. on his Ph.D. in the Electrical Engineering Department of Southern Methodist University. He is co-author of a widely used textbook, The 80x86 IBM PC and Compatible Computers, also available from Prentice Hall. He teaches microprocessor-based system design at DeVry University in Dallas, Texas.

Janice Gillispie Mazidi has a Master of Science degree in Computer Science from the University of North Texas. She has several years of experience as a software engineer in Dallas. She has been chief technical writer and production manager, and was responsible for software development and testing of a widely used textbook, The 80x86 IBM PC and Compatible Computers, also available from Prentice Hall.

Rolin D. McKinlay has a BSEET from DeVry University. He is currently working on his Master's degree and PE license in the state of Texas. He is currently self-employed as a programmer and circuit board designer, and is a partner in MicroDigitalEd.com.



Design with PIC Microcontrollers

John B. Peatman

ISBN: 9788177585513 | © Year: 2002 | Pages: 280

About The Book

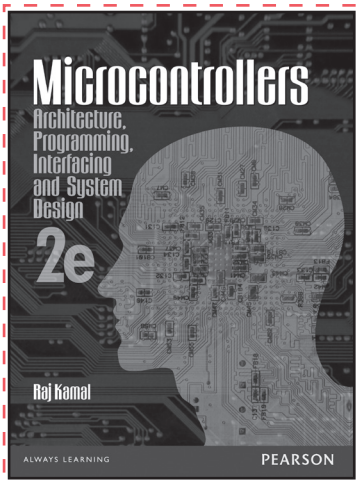
This book is directed towards students of electrical engineering and computer engineering at the senior level and toward practicing engineers. The text develops design techniques for using microcontrollers (i.e., single-chip microcomputers). It emphasizes microcontroller versus microprocessor (e.g., Pentium and Power PC chip) issues.

Features

- Presents expansion with 12C devices.
- Presents the details of the PIC's unusually flexible analog-to-digital conversion facility.
- Discusses the master-slave interconnection of PICs.
- Presents low-power operation alternatives.
- Provides quick insight into the family member which will meet design requirements with block diagram comparisons of PIC family members. (Figure A-4).

Contents

1. A PIC Microcontroller Framework
2. CPU Architecture and Instruction Set
3. MPASM Assember and Its Use
4. LoopTime Subroutine, Timer2 and Interrupts
5. Interrupt Timing and Program Size Considerations
6. External Interrupts and Timers
7. I/O Port Expansion
8. Front-Panel I/O
9. I2C Bus for Peripheral Chip Access
10. Analog-to-Digital Converter
11. UART



Microcontrollers: Architecture, Programming, Interfacing and System Design, 2/e

Raj Kamal

ISBN: 9788131759905 | © Year: 2011 | Pages: 888

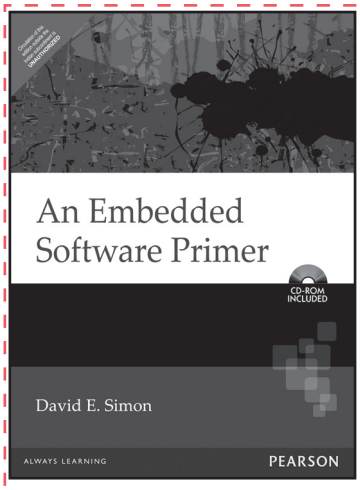
About The Book

This fully revised edition of Microcontrollers is based on the feedback received from users across the country. It prepares the students for system development using the 8051 as well as 68HC11, 80x96, ARM and PIC family microcontrollers. It provides a perfect blend of both hardware and software aspects of the subject. A key feature is the clear explanation of the use of the software building blocks, interrupt handling mechanism, timers, RTOS, IDE and interfacing circuits. It also covers aspects such as programming, interfacing and system design, and offers a large number of figures and tables, examples, end-chapter summaries, meanings of key terms, review questions, practice exercises, and multiple choice questions.

Features

- The architecture, instructions and internal resources in the 8051 microcontroller>.
- The architecture, instructions and internal resources in the PIC, 80196, ARM and 68MC11/12 family microcontrollers.
- The real-time operating system, IDE, interrupt handling mechanisms and timers for real control in systems.
- Interfacing circuits for LED, LCD, keys, inductive coils, relays, motors, optical encoders, robots, input-output power control and DSP systems.

Contents



An Embedded Software Primer

David E. Simon

ISBN: 9788177581546 | © Year: 2002 | Pages: 444

About The Book

An Embedded Software Primer is a clearly written, insightful manual for engineers interested in writing embedded-system software. The example-driven approach puts you on a fast track to understanding embedded-system programming and applying what you learn to your projects. This book will give you the necessary foundation to work confidently in this field. Building on a basic knowledge of computer programming concepts.

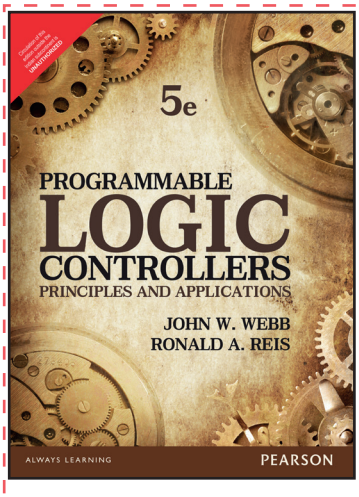
Features

- Learn core principles and advanced techniques of embedded-system software.
- Find out what a real-time operating system (RTOS) does and how to use one effectively.
- Experiment with sample code and the uC/OS RTOS version 1.11 (on the accompanying CD).
- Apply what you learn, no matter which microprocessor or RTOS you use.

Contents

About the Author

David E. Simon is a partner in Probitas Corporation, a software development consulting firm. Much of his Work at Probitas is in embedded systems for firms such as Apple, Adobe, Hewlett-Packard, and Symbol technologies. David has 20 years of experience in software development, and is the author of three previous books. He regularly teaches a class on embedded systems for the University of California at Berkeley Extension program.



Programmable Logic Controllers: Principles and Applications, 5/e

NEW

John W. Webb • Ronald A. Reis

ISBN: 9789332555129 | © Year: 2016 | Pages: 480

About The Book

For an undergraduate-level course on PLCs or Electronic Controls.

This practical and clearly written introduction provides both fundamental and cutting-edge coverage on programmable logic controllers today a billion dollar industry. It combines comprehensive, accessible coverage with a wealth of industry examples that make intangible concepts come to lifeâ€"offering students a broad-based foundation that will serve them well on the job. It examines every aspect of controller usage in an easy-to-understand, jargon-free narrative. Beginning with a basic layout the text goes right into programming techniques, it progresses through fundamental, intermediate, and advanced functionsâ€"and concludes with chapters on related topics. Applications are discussed for each PLC function, and vast arrays of examples and problems help students achieve an understanding of PLCs, and the experience needed to use them.

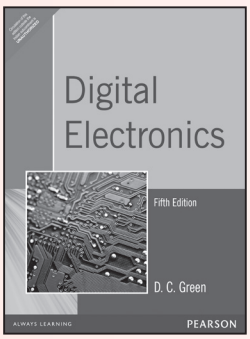
Features

- NEW - Latest developments in PLC model functions and networking capabilities.
- Provides students with guidelines on the most recent programming developments.
- NEW - New chapter on electrical devices connected to I/O modules.
- Provides students with a complete explanation of the latest technology in input/output on/off switching and analog devices.
- NEW - Updated and enhanced pedagogical tools – e.g. equipment illustrations, additional example problems, more troubleshooting questions, enhanced glossary and bibliography.
- Provides students with more effective tools that are easier to use and more motivating.
- NEW - Updated PLC manufacturers listing.
- Provides students with the most current listing of PLC manufacturers.
- NEW - Examination of new International Electrotechnical Commission (IEC) 1131 international standards for PLCs – Including Function Block Diagram (FBD), Sequential Function Chart (SFC), Ladder Diagram (LD), Instruction List (IL), and Structured Text (ST).
- Provides students with a comprehensive look at all the important new standards in the field.
- NEW - New 28-chapter Activities/Laboratory Manual – With 980 true/false, multiple choice, and fill-in questions, plus 170 programming exercises.
- Provides students with helpful activities that reinforce the material in accompanying chapters in the book.
- Extensive pedagogical aids in each chapter – e.g. learning objectives, introduction, explanations, examples and troubleshooting problems.
- Provides students with easy-to-follow guides for determining the important points within each chapter and learning them.
- Presents material in a logical and orderly fashion – Stand-alone chapters provide flexibility and customization.
- Provides students with fortified comprehension every step of the way, so that they can keep pace with technology.

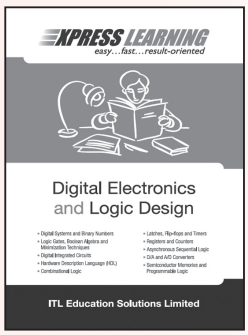
- Examples, troubleshooting problems and exercises.
- Provides students with worked-out solutions, program/application tips integrated into programming chapters and exercises that can be carried out in the laboratory on actual PLCs.
- Maintains a generic approach – By exploring many alternative formats.
- Enables students to apply all the techniques presented to any manufacturer's equipment.
- Matrix type chart.
- Provides students with a reference for major function designations listed by major manufacturers.

Contents

Also Available



ISBN: 9788177580686
Pages: 408



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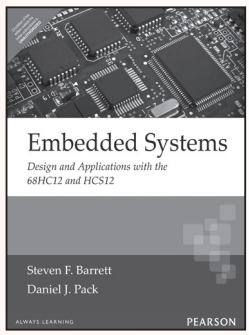

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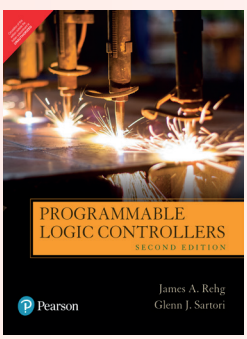

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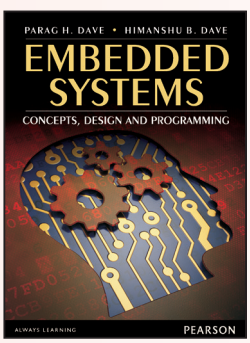

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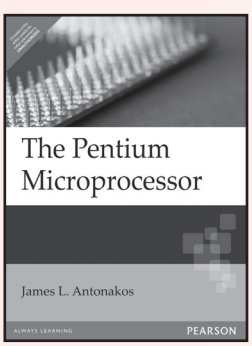

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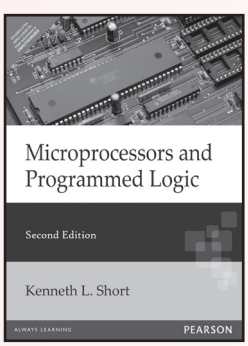

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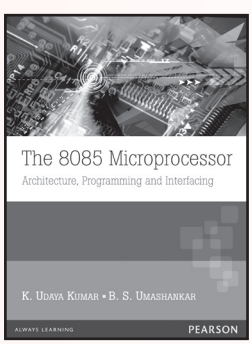
Pages: 640



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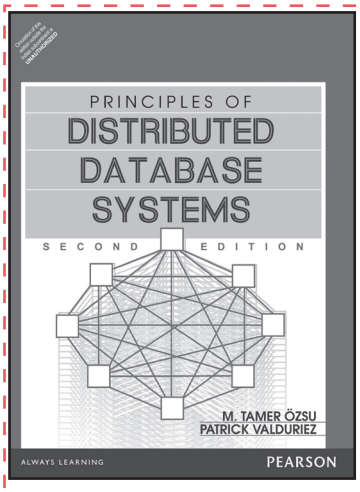


Principles of Distributed Database Systems, 2/e

M. Tamer Ozsu • Patrick Valduriez

ISBN: 9788177581775 | © Year: 2005 | Pages: 612

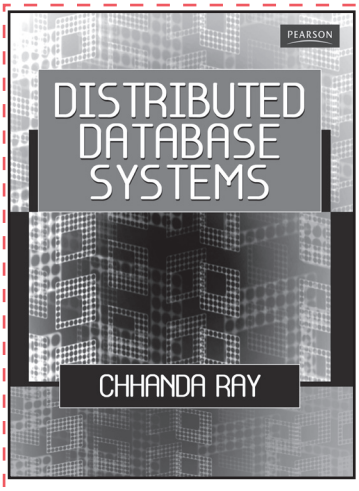
About the Book

This new edition of the best-selling text addresses recent and emerging issues in the field of distributed database systems while maintaining the key features and characteristics of the previous edition. The text has been revised and updated to reflect changes in the field. This comprehensive text focuses on concepts and technical issues while exploring the development of distributed database management systems. **Principles of Distributed Database Systems** presents distributed database systems within the framework of distributed data processing in general, rather than as a problem in isolation.

Features

- The relationship of distributed DBMSs with the new networking technologies is discussed.
- The query processing/optimization chapters now focus on techniques employed in commercial systems and include new algorithms such as randomized search strategies.
- Discussion of advanced transaction models and workflows has been added to the transaction management chapters.
- Full chapters are devoted to parallel DBMSs and distributed object DBMSs.
- Current issues are discussed in a new chapter, including sections on data warehousing, the World Wide Web and databases, push-based technologies, and mobile DBMSs.
- General interoperability issues and distributed object platforms such as OMA/CORBA and DCOM/OLE have been added to the multidatabase systems chapter.
- Review exercises have been added at the end of chapters to address the requirements of students of Indian universities and colleges.

Contents



Distributed Database Systems

Chhanda Ray

ISBN: 9788131727188 | © Year: 2009 | Pages: 324

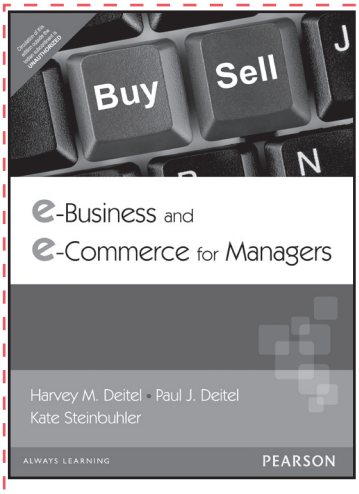
About the Book

Distributed Database Systems discusses the recent and emerging technologies in the field of distributed database technology. The material is up-to-date, highly readable, and illustrated with numerous practical examples. The mainstream areas of distributed database technology, such as distributed database design, distributed DBMS architectures, distributed transaction management, distributed concurrency control, deadlock handling in distributed systems, distributed recovery management, distributed query processing and optimization, data security and catalog management, have been covered in detail. The popular distributed database systems, SDD-1 and R*, have also been included.

Features

- Covers relational DBMS and current networking technologies.
- Comprehensive coverage of parallel databases, distributed DBMS architectures, mobile, object-oriented and object-relational databases.
- Discussion of advanced transaction models and workflows, and random strategies for query optimization.
- A chapter devoted to data warehousing and data mining.
- Case studies on the latest distributed database systems.
- Pedagogy includes chapter objectives and summaries, key definitions, examples, multiple choices and review questions.

Contents



e-Business and e-Commerce for Managers

Harvey M. Deitel • Paul J. Deitel • Kate Steinbuhler

ISBN | 9788131760680 | ©Year: 2001 | Pages: 794

About the Book

e-Business & e-Commerce for Managers is a comprehensive overview of building and managing an e-business. This innovative new text explores topics such as the decision to bring a business online, choosing a business model, accepting payment, marketing strategies and security, as well as many other important issues. Features, Web resources and online demonstrations supplement the text and direct students to additional information. The book also includes a substantial appendix that develops a complete Web-based storefront e-business using a real programming application explained patiently and in depth for a non-programming audience.

Features

- Identifying the e-Business model that offers the greatest potential for profit.
- Covers every element of a successful e-Business: infrastructure, site design, marketing, security, legal and ethical issues, and much more.
- Includes a detailed presentation of online marketing, customer relations, and affiliate programs.

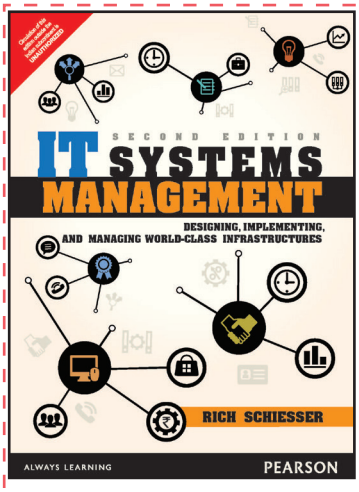
Contents

About the Authors

Harvey M. Deitel, CEO of Deitel & Associates, Inc., has 40 years in the computing field including extensive industry and academic experience. He is one of the world's leading computer science instructors and seminar presenters. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching experience including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc. with Paul J. Deitel. He is author or co-author of several dozen books and multimedia packages and is currently writing many more. With translations published in Japanese, Russian, Spanish, Elementary Chinese, Advanced Chinese, Korean, French, Polish and Portuguese, Dr. Deitel's texts have earned international recognition. Dr. Deitel has delivered professional seminars internationally to major corporations, government organizations and various branches of the military.

Paul J. Deitel, Executive Vice President of Deitel & Associates, Inc., is a graduate of the Massachusetts Institute of Technology's Sloan School of Management where he studies Information Technology. Through Deitel & Associates, Inc. he has delivered Internet and World Wide Web courses and programming language classes for industry clients including Compaq, Sun Microsystems, White Sands Missile Range, Rogue Wave e Software, Computervision, Stratus, Fidelity, Cambridge Technology Partners, Lucent Technologies, Adra Systems, Entergy, CableData Systems, NASA at the Kennedy Space Center, the National Severe Storm Laboratory, IBM and many other organizations. He has lectured on for the Boston Chapter of the Association for Computing Machinery, and has taught satellite-based courses through a cooperative venture of Deitel & Associates, Inc., Prentice Hall and the Technology Education Network. He and his father, Dr. Harvey M. Deitel, are the world's best-selling Computer Science textbook authors.

Kate Steinbuhler, Editorial Director at Deitel & Associates, Inc. and a graduate of Boston College with majors in English and communications, served as project manager and primary author of Chapters 3, 11, 12, 17 and 20. She co-authored Chapters 1, 4, 12 and 14, and served as project manager and co-author for six business chapters in e-Business and e-Commerce for Managers' sister book, e-Business and e-Commerce How To Program. She would like to acknowledge the other members of the PACK (the PACK consists of Paul Brandano, Abbey Deitel, Christy Connolly and Kate Steinbuhler) for their hard work and devotion to the project, and extend a special thank you to Greg Friedman and Alyssa Clapp for their support. She would like to thank Dale Herbeck, Chair and Associate Professor of Communications at Boston College, who provided insights for Chapter 11.



IT Systems Management: Designing, Implementing, and Managing World-Class Infrastructures, 2/e

Rich Schiesser

NEW

ISBN | 9789332550193 | ©Year: 2015 | Pages: 528

About the Book

This is the definitive, up-to-the-minute guide to systems management for every IT professional responsible for maintaining stable, responsive IT production environments. Top IT system management expert Rich Schiesser illuminates both the theoretical and practical aspects of systems management, using methods and examples drawn from decades of professional experience in roles ranging from data center leadership to infrastructure design. Schiesser covers every systems management discipline, every type of IT environment, and all elements of success: technology, processes, and people. This edition adds detailed new coverage of the popular IT Infastructure Library, showing how ITIL's 10 processes align with the 12 processes Schiesser presents. Another new chapter addresses key issues related to ethics, legislation, and outsourcing. Additional new coverage ranges from managing wireless networks, VoIP, and "ultra-speed" Internet to strategic security and new approaches to facilities management

Features

- Allows focused study for professionals concerned with any of the key systems management areas: people, process, and technology.
- --Describes how to develop, integrate, and manage robust, bulletproof processes.
- --Shows how to design, implement, and manage world-class infrastructures.
- --Demonstrates how to develop bullet-proof processes and implement proven systems management techniques.

Contents

About the Authors

Rich Schiesser combines the experiences of a senior IT executive, professional educator, acclaimed author, and highly regarded consultant.

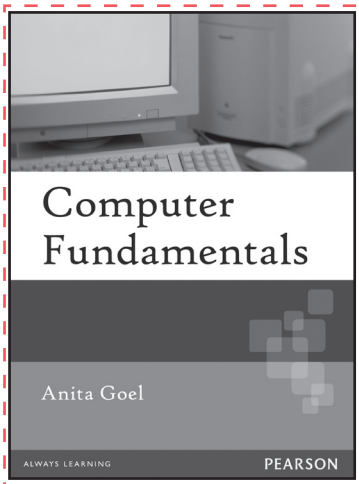
During the past three decades, Rich has headed up major computer centers at firms as diverse as Hughes Aircraft Company, the City of Los Angeles, and Twentieth Century Fox. For nearly 10 years he managed the primary computer center at Northrop Grumman Corporation, considered at the time to be one of the largest and most advanced in the world.

For the past several years, Rich has consulted on designing and implementing world-class infrastructures through his company, RWS Enterprises, Inc. Among his numerous clients are The Weather Channel, Emory Air Freight, Amazon.com, DIRECTV, Las Vegas Police, Option One Mortgage, Lionsgate Entertainment, and St. Joseph Health Systems.

Rich has also consulted at a variety of colleges, including Corinthian Colleges, Victor Valley College, Pasadena City College, University of Montana, and Kern County College District. He has taught a variety of IT classes at California State University, Los Angeles (CSULA), the University of California at Los Angeles (UCLA), and Phoenix University.

In addition to writing the first edition of IT Systems Management, Rich coauthored the best-selling book IT Production Services. He has also written more than 200 articles on IT management for leading trade journals and websites, including InformIT.com.

Rich holds a Bachelor of Science degree from Purdue University, a Master of Science degree from the University of Southern California (USC), and has completed graduate work in business administration from UCLA. He and his wife, Ann, live in Southern California, where they contribute time to their two favorite charities, the Olive Crest home for abandoned and abused children and the Legacy One organization for organ transplants.



Computer Fundamentals

Anita Goel

ISBN: 9788131733097 | © Year: 2010 | Pages: 500

About the Book

Computer Fundamentals is specifically designed to be used at the beginner level. It covers all the basic hardware/ software concepts in Computers and its peripherals in a very lucid manner.

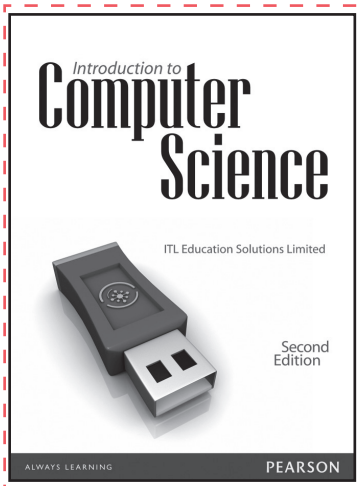
Features

- Excellent pedagogy – multiple-choice questions, true/false questions, review questions and practice problems.
- Exclusive chapters on databases, multimedia, internet services and computer security.
- Includes topics on sixth generation computers, USB, zip disk, notebook computers etc.
- New terminology checklist at the end of each chapter
- Introductory coverage in Windows 7.
- Detailed discussion on MS Office 2007 tools like Word, Excel, PowerPoint.

Contents

About the Author

Dr. Anita Goel is a Reader of Department of Computer Science in Dyal Singh College, Delhi University.



Introduction to Computer Science, 2/e

ITL Education Solutions Limited

ISBN: 9788131760307 | © Year: 2011 | Pages: 528

About the Book

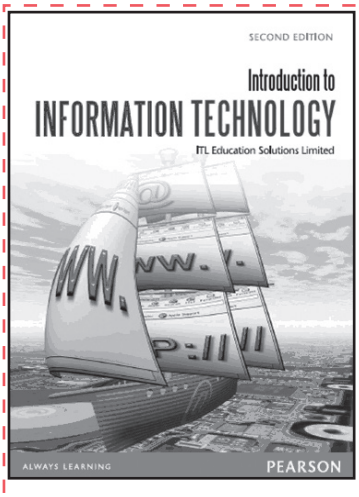
The book furthers the first edition by including discussions on the recent topics. Few of the newly added topics are: blue-ray disk, USB drive, virtual reality etc. Inclusion of large number of practice questions make the text very useful for students in preparing for their examinations.

Features

- Concepts supported by lots of illustrations and examples.
- Chapter revamped to include recent developments.
- Large number of unsolved questions for practice.

Contents

1. Introduction to Computers
2. Number Systems and Logic Gates
3. Computer Architecture
4. Primary Memory
5. Secondary Storage
6. Input Devices
7. Output Devices
8. Computer Program
9. Computer Languages
10. Computer Software
11. Operating System
12. Data Communication and Computer Network
13. Database Fundamentals
14. Internet Basics
15. Multimedia



Introduction to Information Technology, 2/e

ITL Educational Solutions Limited

ISBN: 9788131760291 | © Year: 2012 | Pages: 788

About the Book

Keeping pace with the continuously changing trends in IT field, this new edition of Introduction to Information Technology incorporates the major changes that have taken place in the field of information technology since the release of its first edition, including not only the latest trends but also future technologies. The coverage of practical and historic perspectives on information technology demonstrates how concepts are applied to real systems and shows their evolution since its beginnings. Written in a clear, concise and lucid manner, each chapter is designed to be covered in two or three lectures while keeping inter-chapter dependencies to a minimum.

Features

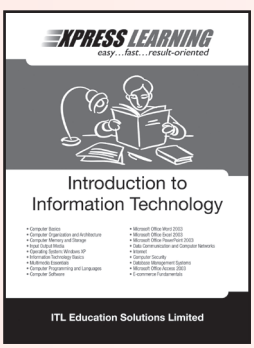
- Complete coverage of the course of various universities across India.
- Inclusion of current advances like: IPTV, Blogging, RFID, Brain Computer Interface.
- Exhaustive discussion on MS Office 2003.
- Discussion on Windows 7.
- Coverage on MS Office 2007.
- Excellent pedagogy: Chapter openers, Chapter objectives, Fact files and things to remember, Further reading, Exercises.

Contents

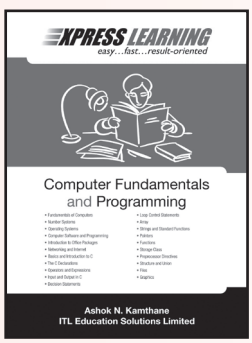
About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.

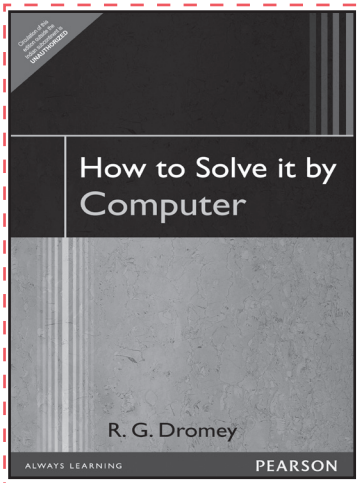
Also Available



ISBN: 9788131769737
Pages: 408



ISBN: 9788131794791
Pages: 464



How to Solve it by Computer

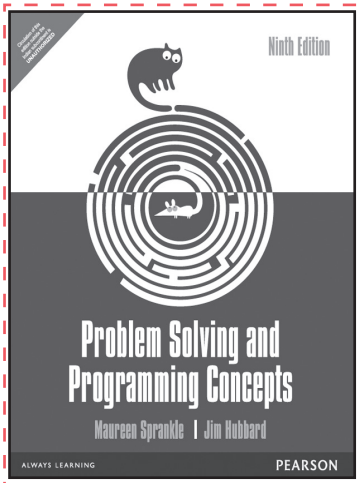
R. G. Dromey

ISBN: 9788131705629 | © Year: 2006 | Pages: 464

About the Book

The inspiration for the approach taken in this book has comefrom the classic work of Polya on general and mathematical problem-solving.Throughout the book,a conscious effort has been made to convey something ofthe flavor of either a personal dialouge or an instructor-student diolouge thatmight tke place in the solution of a problem. This style of presentationcoupled with a carefully chosen set of examples,makes the book attractive to awide range of readers.The problem sets have been carefully designed to test,reinforce, and extend the reader's understanding of the strategies and conceptspresented.

Contents



Problem Solving and Programming Concepts, 9/e

Maureen Sprankle • Jim Hubbard

ISBN: 9789332518841 | © Year: 2013 | Pages: 488

About the Book

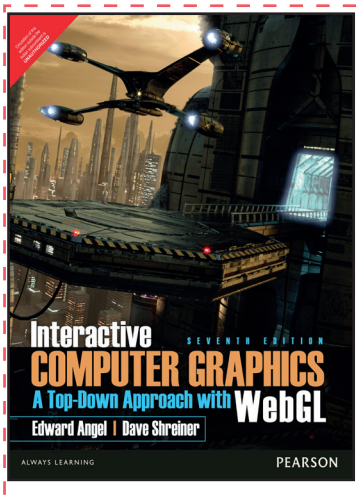
Revised to reflect the most current issues in the programming industry, this widely adopted text emphasizes that problem solving is the same in all computer languages, regardless of syntax. Sprankle and Hubbard use a generic, non-language-specific approach to present the tools and concepts required when using any programming language to develop computer applications. Designed for students with little or no computer experience — but useful to programmers at any level — the text provides step-by-step progression and consistent in-depth coverage of topics, with detailed explanations and many illustrations.

Features

- A generic, non-language-specific approach presents the tools and concepts required when using any programming language to develop computer applications.
- Broad coverage ranges from the basics of mathematical functions and operators to the design and use of such techniques as code, arrays, pointers, other data structures, database concepts, and object-oriented programming concepts.
- Problem-solving tools are used to discuss the problem analysis chart, interactivity (structure) chart, IPO chart, the coupling diagram, algorithms, flowcharts, and tools to help with the development of object oriented programming solutions.
- Structured programming techniques include sequential, decision, loop, and case logic structures.
- A full chapter on variables, constants, data types, functions, operators, equations, and expressions gives students a solid foundation in the concepts that are important to know before starting to develop a program, and which make setting up the basic instructions much easier.

- Various types of data structures are explored, with full chapter coverage on arrays, stacks, linked lists, binary trees, and database.
- Problem solving for applications details includes techniques for page layout, spreadsheets, database management systems, and document processing.
- "What's Wrong with This?" sections in problem sections challenge students to think critically and analytically to debug programs.
- "Putting It All Together sections" walk students through a complete solution for a given problem, using the concepts previously presented.
- Chapter Problems give students hands-on experience in solving problems that are typically found in computer language textbooks.
- Abundant pedagogical aids integrated throughout include chapter objectives, chapter summaries, key words, chapter exercises and problems, glossaries, and tables of flowcharting symbols and functions.

Contents



Interactive Computer Graphics with WebGL, 7/e

NEW

Dave Shreiner • Edward Angel

ISBN: 9789332570498 | © Year: 2016 | Pages: 752

About the Book

This book is suitable for undergraduate students in computer science and engineering, for students in other disciplines who have good programming skills, and for professionals. Computer animation and graphics are now prevalent in everyday life from the computer screen, to the movie screen, to the smart phone screen. The growing excitement about WebGL applications and their ability to integrate HTML5, inspired the authors to exclusively use WebGL in the Seventh Edition of Interactive Computer Graphics with WebGL. Thisis the only introduction to computer graphics text for undergraduates that fully integrates WebGL and emphasizes application-based programming. The top-down, programming-oriented approach allows for coverage of engaging 3D material early in the course so students immediately begin to create their own 3D graphics."

Features

- Engage Students Immediately with 3D Material.
- A top-down, programming-oriented approach allows for coverage of engaging 3D material early in the course so students immediately begin to create their own graphics.
- Low-level algorithms (for topics such as line drawing and filling polygons) are presented after students learn to create graphics.

Contents

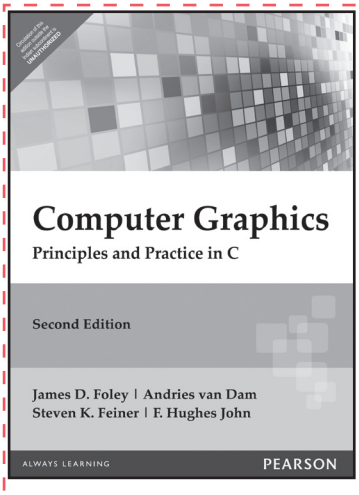
1. Graphics Systems and Models
2. Graphics Programming
3. Interaction and Animation
4. Geometric Object and Transformations
5. Viewing
6. Lighting and Shading
7. Discrete Techniques
8. From Geometry to Pixels
9. Modeling and Hierarchy
10. Procedural Methods
11. Curves and Surfaces
12. Advanced Rendering

About the Author

Edward Angel is a professor of computer science, electrical and computer engineering, and media arts at the University of New Mexico. He holds a PhD from the University of Southern California and a BS in engineering from the California Institute of Technology. He is also the director of Art, Research, Technology, and Science Laboratory (ARTS Lab) and the Arts Technology Center at the University of New Mexico. He is the author of Interactive Computer Graphics and OpenGL: A Primer.

Dave Shreiner is a computer graphics specialist at ARM, Inc. He's been working with OpenGL since its inception at Silicon Graphics Computer Systems (SGI). During his 15-year tenure at SGI, he authored the first commercial OpenGL training course, co-authored the OpenGL programming guide and reference manuals, and engineered OpenGL drivers for a multitude of different systems.

Dave's been working in the computer graphics industry for the past two decades, where he's authored applications for flight simulators, scientific visualization, production animation, and numerous other disciplines. Also passionate about educating programmers about OpenGL and computer graphics, he's presented lectures and short courses at conference world wide, including SIGGRAPH and the Games Developer Conference.



Computer Graphics: Principles and Practice in C, 2/e

James D. Foley • Steven K. Feiner • Andries van Dam
F. Hughes John

ISBN: 9788131705056 | © Year: 2002 | Pages: 1232

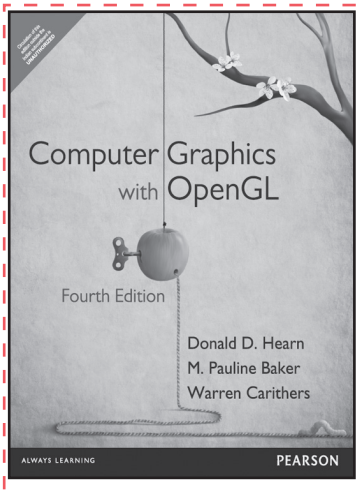
About the Book

The most comprehensive, authoritative, and up-to-date book on computer graphics now presents examples in the C programming language. As before, the authors provide a unique combination of current concepts and practical applications. Important algorithms in 2D and 3D graphics are detailed for easy implementation.

Features

- Programming with SRGP, a simple but powerful raster graphics package that combines features of Apple's Quick Draw and MET X-Window System's graphics library.
- Hierarchical, geometric modeling using SPHIGS, a simplified dialect of the 3D graphics Standard PHIGS
- Raster graphics hardware and software, including both basic and advanced algorithms for scan converting and clipping line, polygons, conics, spline curves, and text.
- Image synthesis, including visible surface determination, illumination and shading models, image manipulation and antialiasing.
- Techniques for photorealistic rendering, including ray tracing and radiosity methods.
- Surface modeling with parametric polynomials, including NURBS, and solid-modeling representations such as B-reps, CSG, and octrees.
- Advanced modeling techniques such as fractals, grammar-based models, particle systems, physically based modeling techniques such as fractals, grammar-based models, particle systems, physically based modeling, and volume rendering.
- Concepts of computer animation and descriptions of state-of-the-art animation systems.

Contents



Computer Graphics with OpenGL, 4/e

Donald D Hearn • M. Pauline Baker • Warren Carithers

ISBN: 9789332518711 | © Year: 2013 | Pages: 820

About the Book

Assuming no background in computer graphics, this textbook presents basic principles for the design, use, and understanding of computer graphics systems and applications. The authors, authorities in their field, offer an integrated approach to two-dimensional and three-dimensional graphics topics. A comprehensive explanation of the popular OpenGL programming package, along with C++ programming examples illustrates applications of the various functions in the OpenGL basic library and the related GLU and GLUT packages.

Features

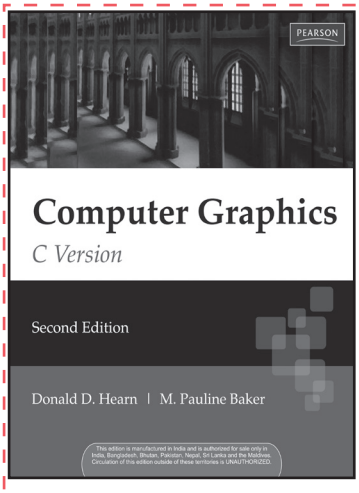
- Complete and comprehensive discussion of the OpenGL computer graphics programming library which provides a large and efficient collection of device independent functions for creating graphics with a general-purpose language.
- Revised content brings the text up-to-date with current advances in computer graphics technology and applications.
- 2D and 3D topics are combined which provides a much more productive organization for teaching 3D graphics.
- Key topics like Animation, object representation, 3D viewing pipeline, illuminations models, surface-rendering technique, and texture mapping are expanded and updated.
- All programming examples in C++ gives students and teachers over 120 reusable C++ programs for instruction and programming.
- Detailed discussions on a variety of mathematical methods used in graphic algorithms—Appear in the appendix.
- Thorough coverage of 3-D modeling and renderin.

Contents

About the Authors

Donald D. Hearn joined the Computer Science faculty at the University of Illinois at Urbana-Champaign in 1985. Dr. Hearn has taught a wide range of courses in computer graphics, scientific visualization, computational science, mathematics, and applied science. Also, he has directed numerous research projects and published a variety of technical articles in these areas.

M. Pauline Baker is on the faculty of the Computer Science Department and the School for Informatics at Indiana University-Purdue University. Dr- Baker is also a Distinguished Scientist and the Director of the Pervasive Technology Lab for Visualization and Interactive Spaces, and she collaborates with research groups on the use of computer graphics and virtual reality to explore scientific data. Previously, Dr. Baker was the Associate Director for Visualization and Virtual Environments at NCSA (National Center for Supercomputer Applications), University of Illinois.



Computer Graphics: C Version, 2/e

Donald D Hearn • M. Pauline Baker

ISBN: 9788177587654 | © Year: 2002 | Pages: 660

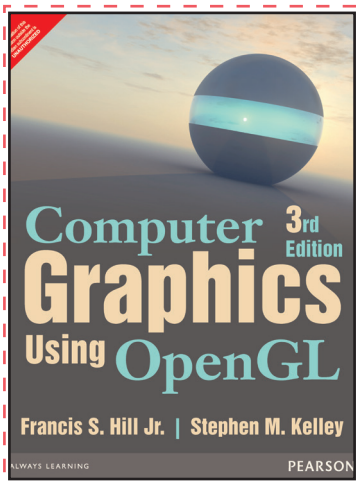
About the Book

Reflecting the rapid expansion of the use of computer graphics and of C as a programming language of choice for implementation, this new version of the best-selling Hearn and Baker text converts all programming code into the C language. Assuming the reader has no prior familiarity with computer graphics, the authors present basic principles for design, use, and understanding of computer graphics systems. The authors are widely considered authorities in computer graphics, and are known for their accessible writing style.

Features

- Discusses current computer graphics hardware and software systems, techniques and applications.
- Explores algorithms for creating and manipulating graphics displays and techniques for implementation.
- Use of programming examples written in C to demonstrate the implementation and application of graphic algorithms.
- Explores GL, PHIGS, PHIGS+, GKS and other graphics libraries.
- Includes thorough coverage of 3-D modeling and rendering.
- Features current topics such as distributed ray tracing, radiosity, physically based modeling, particle systems and visualization techniques.
- Includes appendix with a detailed discussions on a variety of mathematical methods used in graphic algorithms.

Contents



Computer Graphics Using OpenGL, 3/e

Francis S. Hill Jr. • Stephen M. Kelley

ISBN: 9789332555303 | © Year: 2015 | Pages: 800

About the Book

Updated throughout for the latest developments and technologies, this text combines the principles and major techniques in computer graphics with state-of-the-art examples that relate to things students see everyday on the Internet and in computer-generated movies. Practical, accessible, and integrated in approach, it carefully presents each concept, explains the underlying mathematics, shows how to translate the math into program code, and displays the result.

Features

- Text-specific Web site.
- Easy for student to use and obtain source code from book. – Offers convenient access to many images, references and sample programs to support the discussion in the book.
- Vastly expanded to include all color images, source programs for all complete programs given in the text, and resources closely related to the book's material.
- C++ as the underlying programming language – Introduces useful classes for graphics, but does not force a rigid object-oriented posture.
- Early, in-depth treatment of 3D graphics and the underlying mathematics – Enables students to produce realistic 3D graphics much earlier in a course. Students can write programs to "fly" a camera through a 3D scene.
- Extensive case studies at the end of each chapter.
- Clear flow of ideas from first principles to the techniques of graphics.
- Develops the underlying mathematics from first principles.
- Shows students where the math comes from, why it is used, and how it is applied, allowing them to grasp it much more quickly and apply it to their graphics work.
- Clear presentation of the links between a concept, underlying mathematics, program coding, and the result – e.g., the use of vectors in graphics, the underlying theory of transformations, the mathematics of perspective projections, etc.
- An abundance of state-of-the-art worked examples.
- Numerous practice exercises (approx. 30 per chapter).

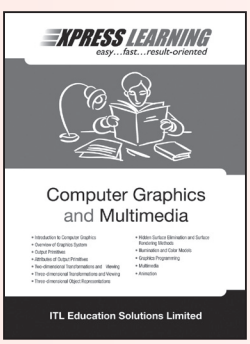
Contents

About the Authors

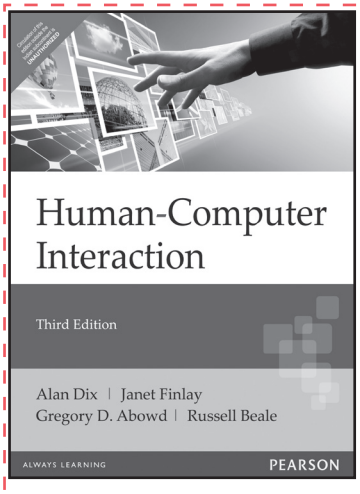
Francis. S. Hill Jr. is a Professor Emeritus of the Electrical and Computer Engineering Department at the University of Massachusetts at Amherst. He received a Ph. D. degree from Yale University in 1968, worked for 3 years in digital data transmission at Bell Telephone Laboratories, and joined the University in 1970. He is the author of numerous articles in the field of signal processing, communications, and computer graphics. He has been editor and associate editor of the IEEE Communications Society magazine. He is also a fellow of the IEEE. He is co-author of the book Introduction To Engineering and has won several awards for outstanding teaching.

Stephen M. Kelley and **Dr. Hill** met in 2000 in connection with a National Science Foundation distance learning project. Since then co-teaching courses in computer graphics at the University of Massachusetts and co-authoring Computer Graphics using OpenGL, 3rd Edition. Stephen Kelley recently graduated from the University of Massachusetts with a degree in Interactive Multimedia and Computer Graphics along with a minor in Information Technology. Stephen also runs his own web development and consulting company, Intangible Inc.

Also Available



ISBN: 9788131785911
Pages: 288



Human-Computer Interaction, 3/e

Alan Dix • Janet E. Finlay • Gregory D. Abowd • Russell Beale

ISBN: 9788131717035 | © Year: 2004 | Pages: 860

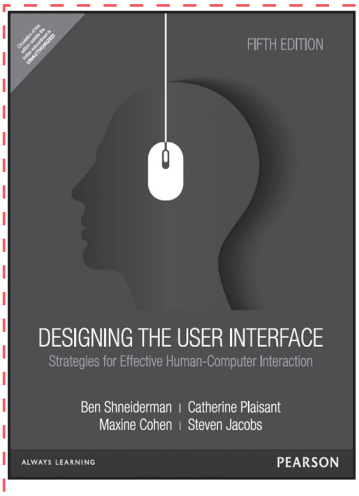
About the Book

The second edition of **Human-Computer Interaction** established itself as one of the classic textbooks in the area, with its broad coverage and rigorous approach, this new edition builds on the existing strengths of the book, but giving the text a more student-friendly slant and improving the coverage in certain areas. The revised structure, separating out the introductory and more advanced material will make it easier to use the book on a variety of courses. This new edition now includes chapters on Interaction Design, Universal Access and Rich Interaction, as well as covering the latest developments in ubiquitous computing and Web technologies, making it the ideal text to provide a grounding in HCI theory and practice.

Features

- Strong usable design.
- Gives details of HCI in practice.
- Covers the latest topics.
- Increased coverage of social and contextual models and theories.
- New chapters on.
- Interaction Design.
- Universal Access.
- Rich Interaction.

Contents



Designing the User Interface: Strategies for Effective Human-Computer Interaction, 5/e

Ben Shneiderman • Maxine Cohen
Steven M. Jacobs • Catherine Plaisant

ISBN: 9789332518735 | © Year: 2014 | Pages: 572

About the Book

The much-anticipated fifth edition of Designing the User Interface provides a comprehensive, authoritative introduction to the dynamic field of human-computer interaction (HCI). Students and professionals learn practical principles and guidelines needed to develop high quality interface designs–ones that users can understand, predict, and control. It covers theoretical foundations, and design processes such as expert reviews and usability testing. Numerous examples of direct manipulation, menu selection, and form fill-in give readers an understanding of excellence in design The new edition provides updates on current HCI topics with balanced emphasis on mobile devices, Web, and desktop platforms. It addresses the profound changes brought by user-generated content of text, photo, music, and video and the raised expectations for compelling user experiences.

Features

- Provides a broad survey of designing, implementing, managing, maintaining, training, and refining the user interface of interactive systems.
- Describes practical techniques and research-supported design guidelines for effective interface designs
- Covers both professional applications (e.g. CAD/CAM, air traffic control) and consumer examples (e.g. web services, e-government, mobile devices, cell phones, digital cameras, games, MP3 players).
- Delivers informative introductions to development methodologies, evaluation techniques, and user-interface building tools.
- Supported by an extensive array of current examples and figures illustrating good design principles and practices.
- Includes dynamic, full-color presentation throughout.
- Guides students who might be starting their first HCI design project.

Contents

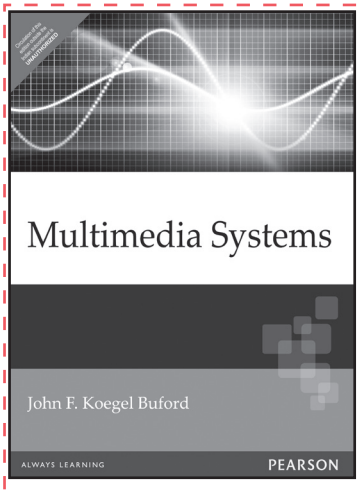
About the Authors

Ben Shneiderman is a Professor in the Department of Computer Science, Founding Director (1983—2000) of the Human-Computer Interaction Laboratory (http://www.cs.umd.edu/hcil), and Member of the Institute for Advanced Computer Studies and the Institute for Systems Research, all at the University of Maryland at College Park. He is a Fellow of the ACM and AAAS and received the ACM CHI (Computer Human Interaction) Lifetime Achievement Award. His books, research papers, and frequent lectures have made him an international leader in this emerging discipline. For relaxation he likes biking, hiking, skiing, and travel.

Maxine S. Cohen is a Professor in the Graduate School of Computer and Information Sciences at Nova Southeastern University in Fort Lauderdale, Florida where she teaches graduate courses in Human-Computer Interaction (HCI). Before joining NSU, she worked at IBM in the User Centered Design department. Prior to IBM, she was a faculty member in the Computer Science department, in the Watson School of Engineering at the State University of New York at Binghamton. She has been teaching and working in the HCI field for over 20 years. She received a B.A. in Mathematics from the University of Vermont, a M.S. (specialization Computer Science) and a Ph.D. (specialization Systems Science) from the State University of New York at Binghamton.

Steven M. Jacobs recently retired from the aerospace industry and is now a lecturer at Northern Arizona University, Flagstaff, Arizona. He was formerly with Northrop Grumman Mission Systems in Carson, California. Mr. Jacobs managed engineers developing user interface and web applications software for various government and commercial applications. He was also Adjunct Assistant Professor at the University of Southern California for 17 years, where he developed and taught their graduate computer science courses in user interface design and human performance engineering. He has also taught short courses in similar topics for UCLA Extension and ACM. He received his M.S.C.S. from UCLA, B.A. in Mathematics from Monmouth University (N.J.).

Catherine Plaisant is Associate Research Scientist at the Human-Computer Interaction Laboratory of the University of Maryland Institute for Advanced Computer Studies. She earned a Doctorat d'Ingénieur degree in France in 1982 and has been conducting research in the field of human-computer interaction since then. In 1987, she joined Professor Shneiderman at the University of Maryland, where she has worked with students and members of the lab, throughout the growth of the field of human-computer interaction. Her research contributions range from focused interaction techniques to innovative visualizations validated with user studies to practical applications developed with industrial partners.



Multimedia Systems

John F. Koegel Buford

ISBN: 9788177588279 | © Year: 2002 | Pages: 464

About the Book

With ongoing work in computing and communications driving new multimedia applications, designers and developers need convenient access to the latest ideas and experiences. Carefully edited by John F. Koegel Buford, Multimedia Systems brings such information together I one place and provides a coherent framework for understanding this rapidly changing field. It presents a technical introduction to key issues in the design and development of multimedia systems, including detailed discussion of new technologies, current research and practice, and future directions.

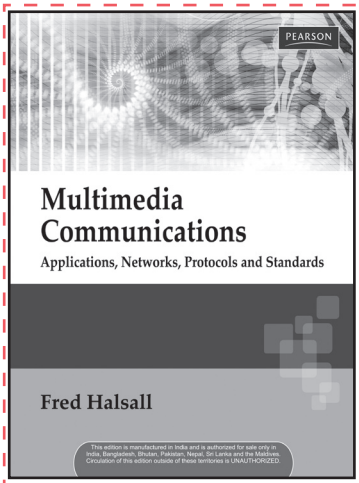
Features

- Provides a single source for basic information on digital media and fundamental multimedia concepts.
- Reviews issues affecting the development of global multimedia information and communication systems.
- Survey current research and practice, as well as future directions in multimedia systems.
- Provides an integrated treatment of multimedia technologies and their use in a variety of computing applications.

Contents

About the Author

John F. Koegel Buford is Director of the Interactive Media Group, a multimedia research group active since 1990, and the developer of various multimedia applications and system services. Dr. Buford has authored more than twenty-five publications, has served as a consultant on multimedia technology, and is active in the multimedia standards community. He holds B.S. and M.S. degrees in Electrical Engineering and Computer Science from MIT and a Ph.D. in Computer Science from the Technizche Universitaet Graz, Austira. He is currently an Assistant Professor of Computer Science at the University of Massachusetts Lowll.



Multimedia Communications: Applications, Networks, Protocols and Standards

Fred Halsall

ISBN: 9788131709948 | © Year: 2002 | Pages: 1056

About the Book

The fast-growing field of multimedia communications involves he use of varied media types (text, images, speech, audio and video) in a wide range of subjects areas.

It include

- How to represent the different media types in a digital form;
- The communication requirements associated with the different types of multimedia applications (video telephony/conferencing, electronic mail, interactive TV, electronic commerce, web TV, etc.
- The operation of the different types of communication networks that are used (campus networks and LANs, the internet and the world wide web, switched telephone networks, and home-entertainment networks such as cable and satellite);
- The new communication protocols and standards that have been developed for use with each of these networks to meet the more demanding requirements of multimedia application.
- Multimedia Communications by Fred Halsall addresses all of these subject areas to depth that enables the reader to build up a thorough understanding of the technical issues associated with this rapidly evolving subject. In addition, the book contains all of the foundation material that is necessary to enable it to be used as a textbook in both computer science and electronic engineering departments. The book is also essential reference for computing and networking professionals.

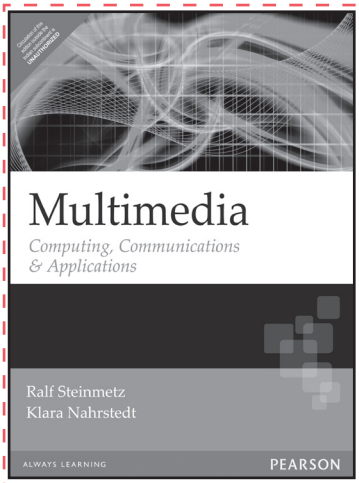
Features

- Embraces all of the main subject areas associated with multimedia communications in a single textbook.
- Extensive use of details diagrams and worked examples as an aid to understanding each major topic.
- End of chapter exercises associated with all topics covered.

Contents

About the Author

Fred Halsall is a Professor of Communications Engineering at the University of Wales, Swansea. Professor Halsall has been involved in research and education in the field of computer networking for the past 30 years. He has published over 50 refereed journal and conference papers. His four textbooks include the successful Data Communications, Computer Networks and Open Systems. He is a Fellow of the IEE and a member of the IEEE.



Multimedia: Computing, Communications & Applications

Ralf Steinmetz • Klara Nahrstedt

ISBN: 9788177584417 | © Year: 2002 | Pages: 880

About the Book

Combining audio and video with text, image, graphics and animation offers a more dynamic presentation than can be achieved through the use of text and image alone. This integration of media provides the possibility for a spectrum of new applications. **Multimedia: Computing, Communications and Applications** examines the challenges of this technology and probes today's developments toward fully integrated working systems.

Features

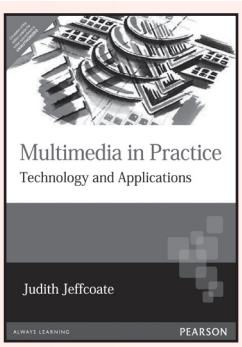
This book serves as a basis for the development of individual components of a multimedia system. Concepts are described and possible practical implementations are presented.

- Basic sound, Image and Graphics Concepts.
- Video and Animation.
- Data Compression.
- Optical Storage Media.
- Multimedia Operating and Communication Systems.
- Documents, Hypertext MHEG.
- User Interfaces.
- Synchronization.
- Multimedia Applications.

With the character of a reference book, Multimedia: Computing, Communications and Applications allows exploration of covered topics without extensive previous study and achieves a complete and balanced view of multimedia systems.

Contents

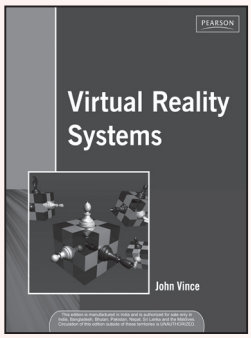
Also Available



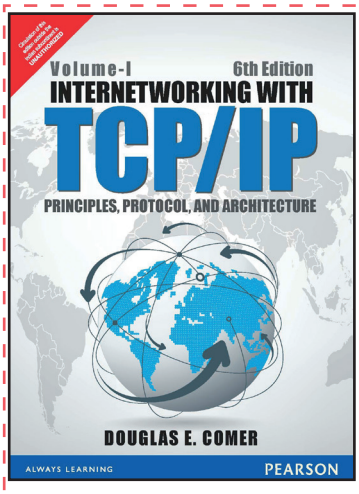
ISBN: 9788131707159
Pages: 256

Virtual Reality/Augmented Reality

ISBN: 9789332578494
Pages: 528



ISBN: 9788131708446
Pages: 400



Internetworking with TCP/IP Vol. 1: Principles, Protocal, and Architecture, 6/e

Douglas E. Comer

ISBN: 9789332550100 | © Year: 2015 | Pages: 744

About the Book

An internationally best-selling, conceptual introduction to the TCP/IP protocols and Internetworking, this book interweaves a clear discussion of fundamentals and scientific principles with details and examples drawn from the latest technologies. Leading author Douglas Comer covers layering and packet formats for all the Internet protocols, includingTCP, IPv4, IPv6, DHCP, and DNS. In addition, the text explains new trends in Internet systems, including packet classification, Software Defined Networking (SDN), and mesh protocols used in The Internet of Things.

The text is appropriate for individuals interested in learning more about TCP/IP protocols, Internet architecture, and current networking technologies, as well as engineers who build network systems. It is suitable for junior to graduate-level courses in Computer Networks, Data Networks, Network Protocols, and Internetworking.

Features

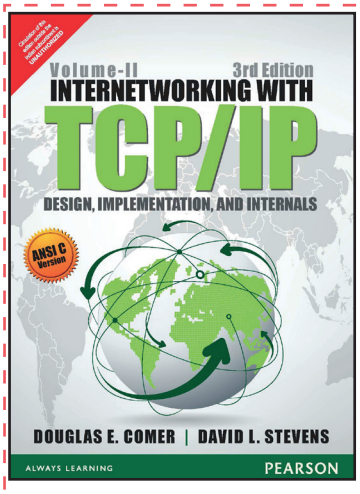
- Voice and Video Over IP (RTP) — Examines the RTP protocol that allows a receiver to coordinate and play real-time data such as voice and video as well as the RSVP and COPS protocols that can be used to provide resource information.
- IP coverage — Up-to-date discussions of Internet Security and Firewalls, Design with IPSEC, the latest IPv6 features, and IP Routing.
- Discussion of routing architectures — Elaborates on the routing architectures used for large and small Internets.
- Examination of Internet application services — Provides students with information on services such as domain name system (DNS), electronic mail (SMTP, MIME), file transfer and access (FTP, TFTP, NFS), remote login (TELNET, rlogin), and network management (SNMP, MIB, ANSI).
- Mobile IP — Describes the technology that allows a computer to move from one network to another without changing its IP address.
- Private Network Interconnection (NAT, VPN) — Teaches students about two key technologies used to interconnect private intranets and the global Internet.

Contents

About the Author

Dr. Douglas E.Comer, Distinguished Professor of Computer Science at Purdue University and former VP of Research at Cisco, is an internationally recognized expert on computer networking, the TCP/IP protocols, and the Internet. The author of numerous refereed articles and technical books, he is a pioneer in the development of curriculum and laboratories for research and education.

A prolific author, Comer's popular books have been translated into over 15 languages, and are used in industry as well as computer science, engineering, and business departments around the world. His landmark three-volume series Internetworking With TCP/IP revolutionized networking and network education. His textbooks and innovative laboratory manuals have and continue to shape graduate and undergraduate curricula.



Internetworking with TCP/IP Vol. II: Design, Implementation, and Internals, 3/e

Douglas E. Comer • David L. Stevens

ISBN: 9789332550261 | © Year: 2015 | Pages: 660

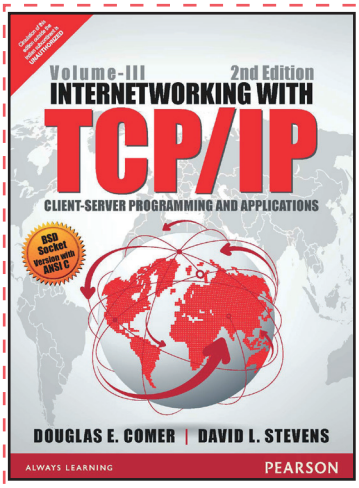
About the Book

The authors provide an in-depth look at individual TCP/IP protocols in light of design alternatives, implementation techniques with actual ANSI C code, and the internals of protocol software. This book uses the widely accepted data-mark interpretation of TCP urgent data, and a discussion of the consequences is included. Throughout the book the authors use a working system— which they designed and built using ANSI C—to explain the interaction among protocols, the complete implementation process, and the internal structure.

Features

- Reflects changes in the protocol standards and updates the example code to ANSI standard C.
- Contains working source code in ANSI C for most protocols including TCP, IP, ICMP, IGMP, UDP, ARP, RIP, SNMP, and a significant part of OSPF.
- Defines data structures, constants, and code for procedures and processes in ANSI standard C.
- Provides active experimentation with a working TCP/IP implementation.
- Implementation support for the IGMP protocol used for IP multicasting and multicast OSPF routing protocol used in applications such as audio and video multicast.
- Unique coverage of the Open Shortest path First link-state routing protocol designed by the IETF.
- Shows the latest interpretation of the urgent data processing.

Contents



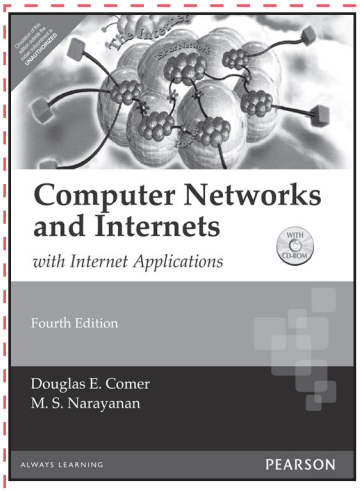
Internetworking with TCP/IP Vol. III, Client-Server Programming and Applications-BSD Socket Version, 2/e

Douglas E. Comer • David L. Stevens

ISBN: 9789332549876 | © Year: 2015 | Pages: 552

About the Book

This is the Second Edition of Vol. III BSD Socket Version from one of the most popular TCP/IP Internetworking series ever published. This new edition includes code in ANSI C throughout. This is the only book available who's central theme is software design that teaches designers how to structure clients and servers. The server designs are directly applicable to WWW and other applications. The authors present the most complete coverage of server technology that allows designers to understand the costs and benefits of advanced server technologies. In addition, the Second Edition discusses the use of application gateways to allow client-server communication across heterogeneous protocols.



Computer Networks and Internets with Internet Applications, 4/e

Douglas E. Comer • M. S. Narayanan

ISBN: 9788177589276 | © Year: 2008 | Pages: 624

About the Book

This book provides a comprehensive, self-contained tour through all of networking - from the lowest levels of data transmission and wiring to the highest levels of application software - explaining how underlying technologies provide services and how Internet applications use those services. For instructors who want to emphasize Internet technologies and applications, Computer Networks provides substantial sections on internetworking and network applications. This updated edition reflects recent advances in networking and internet technology. An accompanying multimedia CD-ROM and online resources provide opportunities for a variety of hands-on experiences.

Features

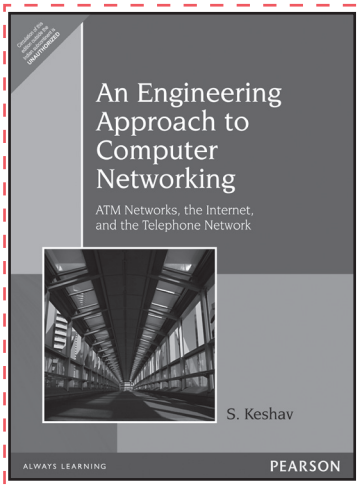
- FAQ email list with answers to questions from a leading networking authority.
- NEW - Chapter 24, User Datagram Protocol: Introduces an end-to-end datagram protocol and illustrates its use. Once considered insignificant, UDP forms the important basis for multicast and broadcast applications and new applications that transfer audio or video.
- NEW - Chapter 26, Network Address Translation (NAT): Explains how NAT technology overcomes a major limitation of the Internet by allowing multiple computers to share a single IP address, especially important for residential and small business installations.
- NEW - Chapter 33, IP Telephony: Discusses the most exciting new Internet application, transmitting telephone calls over the Internet (VoIP). The chapter explains competing standards for IP telephony, including protocols such as H.323, Session Initiation Protocol (SIP), and Megacolt. This chapter also presents a sample SIP session.
- Includes a CD-ROM with animations, packet traces, more than 200 photos of networking equipment, code from the book and copies of protocol standards.

Contents

About the Authors

Douglas E. Comer is a distinguished Professor of Computer Science at Purdue University and a Fellow of the ACM.

M. S. Narayanan is PG Professor at Rajalakshmi Engineering College in Chennai.



An Engineering Approach to Computer Networking: ATM Networks, the Internet, and the Telephone Network

S. Keshav

ISBN: 9788131711453 | © Year: 2002 | Pages: 644

About the Book

This book provides and introduction to the inner workings of computer networks, taking a unique 'engineering' approach that helps readers gain insight into not just how but also why networks work the way they do.

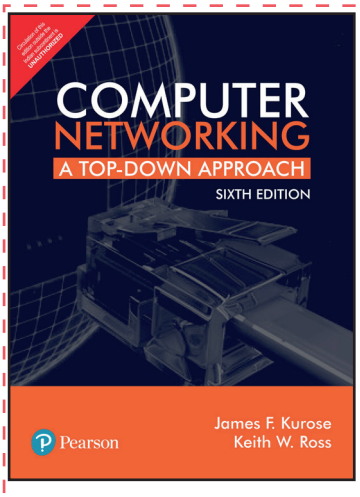
Features

- The first practical treatment of ATM.
- Discusses the three major networks: telephone, Internet, and ATM.

Contents

About the Author

S. Keshav is a part of the AT&T Research Team. He has taught at Indian Institute of Technology, Delhi, Columbia University, New York & Cornell University, Ithaca.



Computer Networking: A Top-Down Approach, 6/e

James F. Kurose • Keith W. Ross

New Edition

ISBN: 9789332585492 | © Year: 2017 | Pages: 888

About the Book

Building on the successful top-down approach of previous editions, the Sixth Edition of Computer Networking continues with an early emphasis on application-layer paradigms and application programming interfaces (the top layer), encouraging a hands-on experience with protocols and networking concepts, before working down the protocol stack to more abstract layers.

This book has become the dominant book for this course because of the authors' reputations, the precision of explanation, the quality of the art program, and the value of their own supplements.

Features

- A balanced presentation focuses on the Internet as a specific motivating example of a network and also introduces students to protocols in a more theoretical context.
- A chapter on wireless and mobility includes insight into 802.11 and coverage of ad hoc networking.
- Principles and Practice boxes throughout demonstrate real-world applications of the principles studied.
- Case History boxes are sprinkled in to help tell the story of the history and development of computer networking.
- Material on application programming development is included, along with numerous programming assignments.
- A highly developed art program enhances the descriptions of concepts.

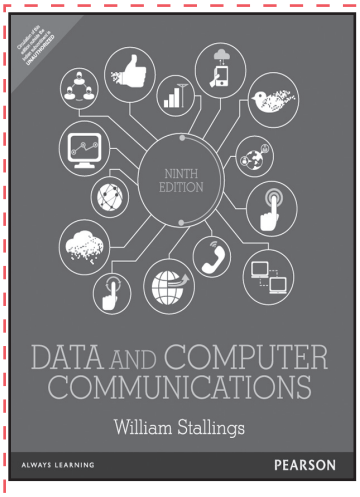
Contents

7. Multimedia Networking
8. Security in Computer Networks
9. Network Management

About the Authors

James Kurose teaches at the University of Massachusetts at Amherst. His research interests include network protocols and architecture, network measurement, sensor networks, multimedia communication, and modeling and performance evaluation. He received his PhD from Columbia University.

Keith Ross is a professor of computer science at University of Pennsylvania/EUROCOM. He has worked in peer-to-peer networking, Internet measurement, video streaming, Web caching, multi-service loss networks, content distribution networks, voice over IP, optimization, queuing theory, optimal control of queues, and Markov decision processes. Professor Ross received his PhD in Computer and Control Engineering from the University of Michigan.



Data and Computer Communication, 10/e

William Stallings

ISBN: 9789332518865 | © Year: 2013 | Pages: 868

About the Book

With a focus on the most current technology and a convenient modular format, this best-selling text offers a clear and comprehensive survey of the entire data and computer communications field. Emphasizing both the fundamental principles as well as the critical role of performance in driving protocol and network design, it explores in detail all the critical technical areas in data communications, wide-area networking, local area networking, and protocol design.

Features

- A modular format — This structure allows instructors to easily design a course to meet their individual needs. For students, it breaks this massive subject into comprehensible parts.
- Unifying principles — The text repeatedly emphasizes such principles as multiplexing, flow control, and error control, and contrasts their application in specific areas of technology. This enables students to understand how the same protocol design principles are applied at different levels of the protocol architecture.
- Design Approaches — Exploring alternative approaches to meeting specific communication requirements gives students a deeper understanding of communication system and protocol design.
- Standards — A comprehensive discussion of the current status and future direction of related technology standards helps students understand the central role of standards in network and protocol design.
- More than 250 homework problems — Problems ranging in difficulty, with solutions provided on the Instructor's Resource Center, give students the opportunity to test their comprehension of concepts.
- Strong pedagogical support — The liberal use of figures and tables; glossary; list of acronyms; recommended reading list and Websites; and a bibliography provide students with convenient study tools.

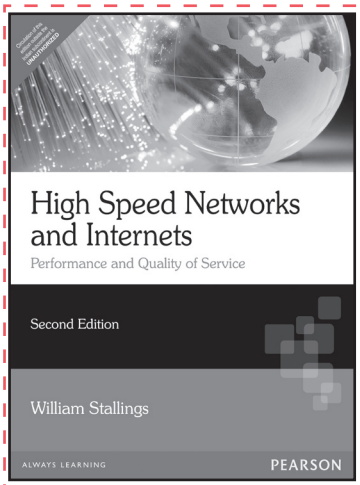
Contents

1. Data Communications, Data Networks, and the Internet
2. Protocol Architecture, TCP/IP, and Internet-Based Applications
3. Data Transmission
4. Transmission Media
5. Signal Encoding Techniques
6. Error Detection and Correction
7. Data Link Control Protocols
8. Multiplexing
9. WAN Technology and Protocols
10. Cellular Wireless Networks
11. Local Area Network Overview
12. Ethernet

13. Wireless LANs
14. The Internet Protocol
15. Transport Protocols
16. Advanced Data Communications Topics
17. Wireless Transmission Techniques
18. Wireless Networks
19. Routing
20. Congestion Control
21. Internetwork Operation
22. Internetwork Quality of Service
23. Multiprotocol Label Switching
24. Electronic Mail, DNS, and HTTP
25 Internet Multimedia Support

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 18 titles, and counting revised editions, a total of 35 books on various aspects of these subjects. In over 20 years in the field, he has been a technical contributor, technical manager, and an executive with several high-technology firms. Currently he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge government research institutions.He has six times received the prize for best Computer Science and Engineering textbook of the year from the Textbook and Academic Authors Association.



High-Speed Networks and Internets: Performance and Quality of Service, 2/e

William Stallings

ISBN: 9788177585698 | ©Year: 2002 | Pages: 744

About the Book

High-Speed Networks and Internets, Performance and Quality of Service Second Edition, William Stallings offers the most comprehensive technical book to address a wide range of design issues of high-speed TCP/IP and ATM networks in print to date. High-Speed Networks and Internets both the professional and advanced student an up-to-date survey of key issues. The Companion Website and the author's Web page offer unmatched support for students and instructors. The book features the prominent use of figures and tables and an up-to-date bibliography.

New and/or revised in this edition:

In this second edition, this award-winning and best-selling author steps up to the leading edge of integrated coverage of key issues in the design of high-speed TCP/IP and ATM networks to include the following topics:

- Unified coverage of integrated and differentiated services.
- Up-to-date and comprehensive coverage of TCP performance.
- Thorough coverage of next-generation Internet protocols including (RSVP), (MPLS), (RTP), and the use of Ipv6.
- Unified treatment of congestion in data networks: packet-switching, frame relay, ATM networks, and IP-based internets.
- Broad and detailed coverage of routing, unicast, and multicast.
- Comprehensive coverage of ATM: basic technology and the newest traffic control standards.
- Solid, easy-to-absorb mathematical background enabling understanding of the issues related to high-speed network performance and design.
- Up-to-date treatment of gigabit Ethernet.
- The first treatment of self-similar traffic for performance assessment in a textbook on networks (Explains the mathematics behind self-similar traffic and shows the performance implications and how to estimate performance parameters).
- Up-to-date coverage of compression. (A comprehensive survey).
- Coverage of gigabit networks. Gigabit design issues permeate the book.

Features

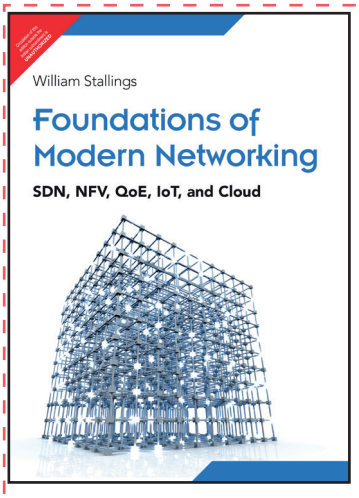
- Congestion Control
- Differentiated Services

- Guaranteed Frame Rate (GFR)
- Multiprotocol Label Switching (MPLS)
- TCP/IP details
- High Speed LANs
- Frame Relay
- Wavelet Compression

Contents

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 15 titles on various aspects of these subjects (a total of 34 books including revised editions). Currently, he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge governmental research institutions. Dr. Stallings received the Ph.D. degree in computer science from M.I.T. and the B.S. degree in electrical engineering from Notre Dame. All of his Prentice Hall titles can be found at the Prentice Hall web site, http://www.prenhall.com.



Foundations of Modern Networking: SDN, NFV, QoE, IoT, and Cloud, 1/e

NEW

William Stallings

ISBN: 9789332573864 | ©Year: 2016 | Pages: 568

About the Book

SDN, NFV, and QoE: Foundations of Modern Networking is a comprehensive and unified survey of modern networking technology and applications for today's technical professionals, business professionals, and students. Using the same teaching approach that has earned him 13 "Computer Science Textbook of the Year" Awards, Dr. Stallings imparts a thorough understanding of SDN technology: how it works, how it is deployed, and how enterprises of all sizes can use it to deliver superior Quality of Service (QoS) and Quality of Experience (QoE).

Features

- The most comprehensive, authoritative guide to SDN, QoS/QoE, and related technologies: components, interactions, standards, deployment, migration, usage, management, and more.
- Thoroughly introduces Quality of Experience (QoE): how enterprises are extending QoS to fully tailor their network services and performance around emerging customer needs.

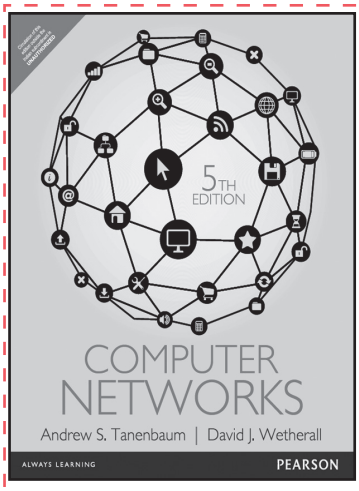
- Contains extensive new application coverage -- from OTT and IPTV to cloud computing/services, Big Data, mobile, and Internet of Things.
- Includes detailed coverage of security, virtualization, OpenFlow, and many other key issues.
- Discusses the career implications of the shift to SDNs and the cloud: changing jobs, skills, and educational priorities.
- Promotes learning through carefully-crafted chapter objectives, summaries, questions, keyword lists, glossaries, and other features - including QR links to web resources.

Contents

1. Elements of Modern Networking
2. Requirements and Technology
3. SDN: Background and Motivation
4. SDN Data Plane and OpenFlow
5. SDN Control Plane
6. SDN Application Plane
7. Network Functions Virtualization: Concepts and Architecture
8. NFV Functionality
9. Network Virtualization
10. Quality of Service
11. QoE: User Quality of Experience
12. Network Design Implications of QoS and QoE
13. Cloud Computing
14. The Internet of Things: Components
15. The Internet of Things: Architecture and Implementation
16. Security
17. The Impact of the New Networking on IT Careers

About the Author

Dr. William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer security, computer networking, and computer architecture. He has authored 18 textbooks, and, counting revised editions, a total of 70 books on various aspects of these subjects. His writings have appeared in numerous ACM and IEEE publications, including the Proceedings of the IEEE and ACM Computing Reviews. He has 13 times received the award for the best computer science textbook of the year from the Text and Academic Authors Association.



Computer Networks, 5/e

Andrew S. Tanenbaum • David J. Wetherall

ISBN: 9789332518742 | © Year: 2013 | Pages:816

About the Book

Computer Networks, Fifth Edition, is the ideal introduction to the networking field. This bestseller reflects the latest networking technologies with a special emphasis on wireless networking, including 802.11, 802.16, Bluetooth&trade, and 3G cellular, paired with fixed-network coverage of ADSL, Internet over cable, gigabit Ethernet, MLPS, and peer-to-peer networks. Notably, this latest edition incorporates new coverage on 3G mobile phone networks, Fiber to the Home, RIFD, delay-tolerant networks, and 802.11 security, in addition to expanded material on Internet routing, multicasting, congestion control, quality of service, real-time transport, and content distribution.

Tanenbaum takes a structured approach to explaining how networks work from the inside out. He starts with an explanation of the physical layer of networking, computer hardware and transmission systems then works his way up to network applications.

Features

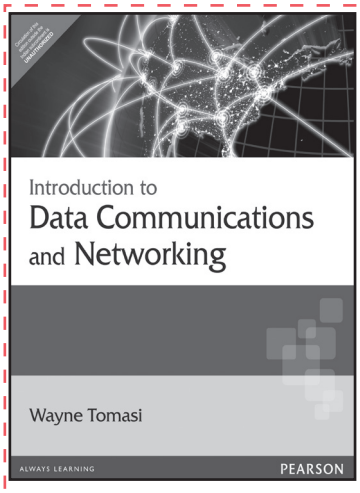
- Revised and new material on
- Wireless networks (802.12 and 802.16)
- The 3G networks used by smart phones
- RFID and sensor networks
- Content Distribution using CDNs
- Peer-to-peer networks
- Real-time media (from stored, streaming, and live sources)
- Internet telephony (voice over IP)
- Delay-tolerant networks

Contents

About the Authors

Andrew S. Tanenbaum, Vrije University, Amsterdam, The Netherlands.

David J. Wetherall, University of Washington.



Introduction to Data Communications and Networking

Wayne Tomasi

ISBN: 9788131709306 | © Year: 2007 | Pages: 986

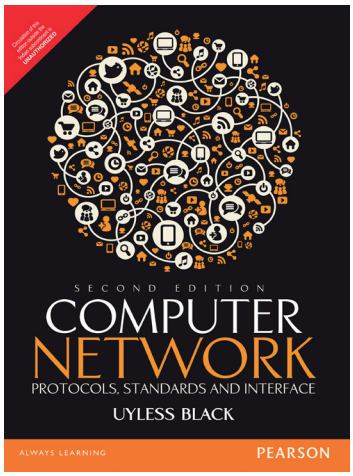
About the Book

Written to introduce students to the fundamental concepts of electronic communications systems, data systems, and networks, this text provides extensive coverage of a wide range of data communications and networking issues while offering preliminary information on basic electronic communications and telecommunications systems. Topics explored include wireless and wireline telecommunications systems, basic data communications networks and systems, local area networks, internetworks, and the Internet including TCP/IP protocol suite.

Features

- Brief history of data communications is given along with the fundamental concepts of data communications and networking.
- Practical description of the TCP/IP protocol suite—Including Security topics.
- Comparison of advantages and disadvantages in areas such as metallic transmission media to optical fiber transmission media, and digital pulse transmission.
- Coverage of wireless communications systems.

Contents



Computer Networks: Protocols, Standards and Interface, 2/e

Uyless Black

ISBN: 9789332549524 | © Year: 2015 | Pages: 444

About the Book

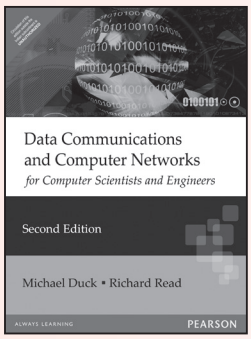
This new release offers a succinct tutorial in each of the major types of networking technologies in use today. New in this edition is the coverage of Frame Relay, SMDS, FDDI, and Sinet technologies. Book is organized in modular manner so that readers can delve into the technologies of interest to them.

Features

- Covers the latest network technology including frame relay, SMDS, FDDI and SONET.
- Offers a modular chapter approach so that each chapter provides a complete description of a major computer network technology.
- Describes computer networks in an easy-to-understand narrative form amplified with the use of tables and graphics.

Contents

Also Available



ISBN: 9788131726082
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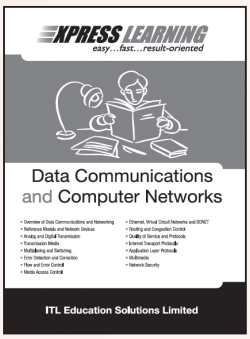

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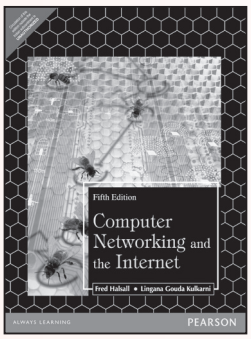

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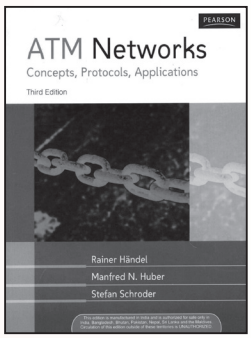

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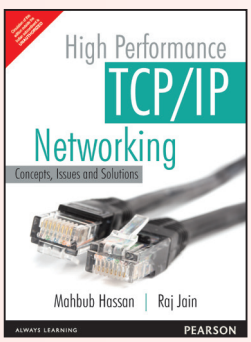

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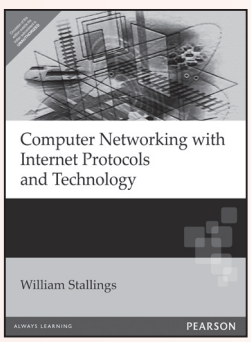

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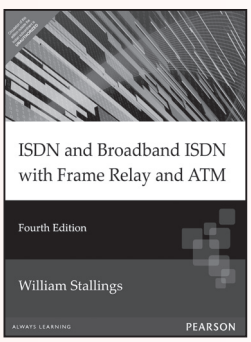

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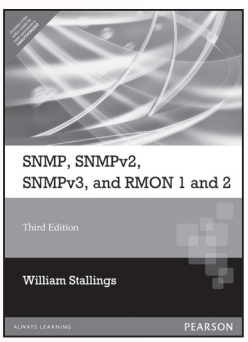

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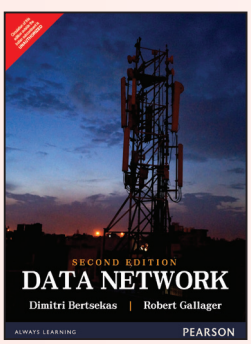

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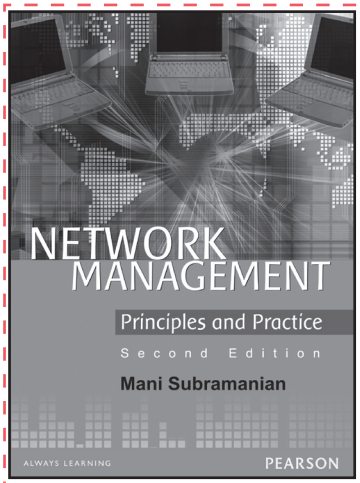


Network Management: Principles and Practice, 2/e

Mani Subramanian

ISBN: 9788131727591 | © Year: 2010 | Pages: 724

About the Book

This edition is thoroughly updated and expanded to address broadband network management and the latest trends in the network management technology and standards. The author's unique approach thoroughly illustrates the theoretical and practical aspects of network management, and the technologies and the tools that academics and network managers simply must know.

Features

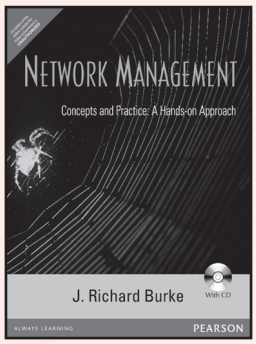
- Network management extended to telecommunications management.
- Maps the concept of eTOM with TMN.
- Extensive treatment on the design of an NMS with practical perspective.
- Focuses on management of wired, fixed wireless and mobile broadband access, and home networks including evolving management protocols and MIBs.
- Elucidates management of Optical and MPLS networks widely deployed in the telecommunications network.
- Web-, CORBA-, and XML-based technologies addressed along with NGOSS technology.

Contents

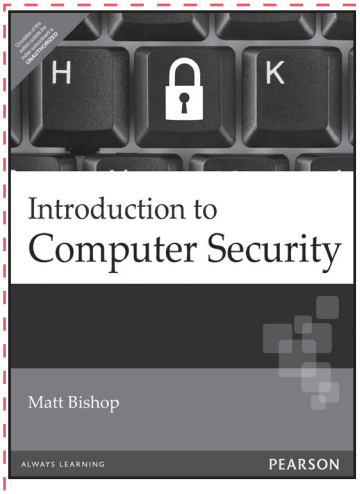
About the Author

Mani Subramaniam is a professor at Georgia Institute of Technology, where he teaches a Network Management course based on his years of industry experience. He has led research and development at several networking corporations and has practical knowledge of networking and network management. In 1989, he was elected Technical Director of the OSI Network Management Forum and was responsible for the first release of OSI NM specifications. Dr. Subramanian received his Ph.D. from Purdue University.

Also Available



ISBN: 9788131718490
Pages: 544



Introduction to Computer Security

Matt Bishop

ISBN: 9788177584257 | © Year: 2005 | Pages: 616

About the Book

Introduction to Computer Security draws upon Bishop's widely praised Computer Security: Art and Science, without the highly complex and mathematical coverage that most undergraduate students would find difficult or unnecessary. The result: the field's most concise, accessible, and useful introduction. Matt Bishop thoroughly introduces fundamental techniques and principles for modeling and analyzing security. Readers learn how to express security requirements, translate requirements into policies, implement mechanisms that enforce policy, and ensure that policies are effective. Along the way, the author explains how failures may be exploited by attackers and how attacks may be discovered, understood, and countered. Supplements available including slides and solutions.

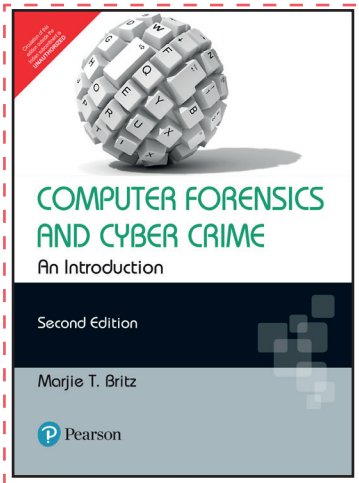
Features

- Focuses more on the application of theory thereby students will immediately be able to apply what they learn.
- An excellent and beautifully written introduction to the concept of computer security.
- An introduction to the science and challenges of computer security, useful as either a self-teaching tool or a classroom text.
- Trimmed down and less expensive version of Bishop's definitive work on computer security, with more mathematical and advanced sections removed.

Contents

About the Author

Matt Bishop is a Professor in the Department of Computer Science at the University of California at Davis. A recognized expert in vulnerability analysis, secure systems/ software design, network security, access control, authentication, and UNIX security, Bishop also works to improve computer security instruction.



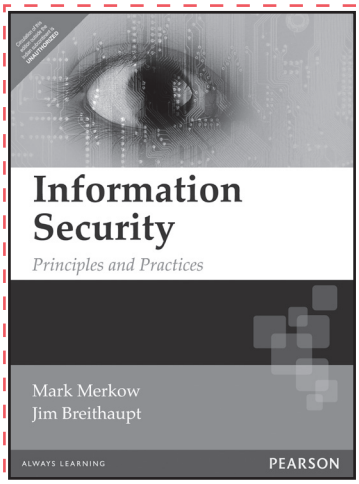
Computer Forensics and Cyber C

Marjie T Britz

ISBN: 9788131764015 | © Year: 2011 | Pages: 404

About the Book

Completely updated in a new edition, this book fully defines computer-related crime and the legal issues involved in its investigation. Re-organized with different chapter headings for better understanding of the subject, it provides a framework for the development of a computer crime unit. Updated with new information on technology, this book is the only comprehensive examination of computer-related crime and its investigation on the market. It includes an exhaustive discussion of legal and social issues, fully defines computer crime, and provides specific examples of criminal activities involving computers, while discussing the phenomenon in the context of the criminal justice system. Computer Forensics and Cyber Crime 2e provides a comprehensive analysis of current case law, constitutional challenges, and government legislation. New to this edition is a chapter on Organized Crime & Terrorism and how it relates to computer related crime as well as more comprehensive information on Processing Evidence and Report Preparation.



Information Security: Principles and Practices

Mark Merkow • Jim Breithaupt

ISBN: 9788131712887 | © Year: 2007 | Pages: 275

About the Book

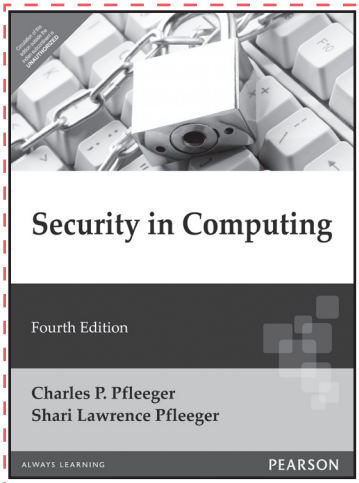
For a introductory course in information security covering principles and practices. This text has been developed to cover the 10 domains in the Information Security Common Body of Knowledge. They include: Security Management Practices, Security Architecture and Models, Business Continuity Planning (BCP) and Disaster Recovery Planning (DRP), Law, Investigations, and Ethics, Physical Security, Operations Security, Access Control Systems and Methodology, Cryptography, Telecommunications, Network, and Internet Security.

Features

- Information Security Principles and Practices provides thorough coverage of each domain so students understand these widely accepted categories of information security.
- This text's coverage of why students need to know about information security, principles of success and the future of information security prepares them for the real-world environment.
- Appendices include: Common Body of Knowledge, Security Policy and Standards Taxonomy, Sample Policies, and HIPAA Security Rule Standards, which provides students with real-life examples and additional resources.

Contents

1. Why Study Information Security?
2. Information Security Principles of Success
3. Certification Programs and the Common Body of Knowledge
4. Security Management
5. Security Architecture and Models
6. Business Continuity Planning and Disaster Recovery Planning
7. Law, Investigations, and Ethics
8. Physical Security Control
9. Operations Security
10. Access Control Systems and Methodology
11. Cryptography
12. Telecommunications, Network, and Internet Security
13. Application Development Security



Security in Computing, 4/e

Charles P. Pfleeger • Shari Lawrence Pfleeger

ISBN: 9788131727256 | © Year: 2007 | Pages: 876

About the Book

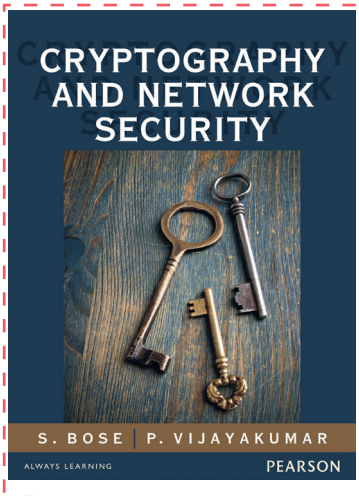
The New State-of-the-Art in Information Security: Now Covers the Economics of Cyber Security and the Intersection of Privacy and Information Security for years, IT and security professionals and students have turned to **Security in Computing** as the definitive guide to information about computer security attacks and countermeasures. In their new fourth edition, Charles P. Pfleeger and Shari Lawrence Pfleeger have thoroughly updated their classic guide to reflect today's newest technologies, standards, and trends. The authors first introduce the core concepts and vocabulary of computer security, including attacks and controls. Next, the authors systematically identify and assess threats now facing programs, operating systems, database systems, and networks. For each threat, they offer best-practice responses. Security in Computing, Fourth Edition, goes beyond technology, covering crucial management issues faced in protecting infrastructure and information. This edition contains an all-new chapter on the economics of cybersecurity, explaining ways to make a business case for security investments. Another new chapter addresses privacy--from data mining and identity theft, to RFID and e-voting.

Features

- Programming mistakes that compromise security: man-in-the-middle, timing, and privilege escalation attacks.
- Web application threats and vulnerabilities.
- Networks of compromised systems: bots, botnets, and drones.
- Rootkits--including the notorious Sony XCP.
- Wi-Fi network security challenges, standards, and techniques.
- New malicious code attacks, including false interfaces and keystroke loggers.
- Improving code quality: software engineering, testing, and liability approaches.
- Biometric authentication: capabilities and limitations.
- Using the Advanced Encryption System (AES) more effectively.
- Balancing dissemination with piracy control in music and other digital content.
- Countering new cryptanalytic attacks against RSA, DES, and SHA.
- Responding to the emergence of organized attacker groups pursuing profit.

Contents

1. Is There a Security Problem in Computing?
2. Elementary Cryptography
3. Program Security
4. Protection in General-Purpose Operating Systems
5. Designing Trusted Operating Systems
6. Database and Data Mining Security
7. Security in Networks
8. Administering Security
9. The Economics of Cybersecurity
10. Privacy in Computing
11. Legal and Ethical Issues in Computer Security
12. Cryptography Explained



Cryptography and Network Security

Dr. P. Vijaykumar

NEW

ISBN: 9789332543645 | © Year: 2016 | Pages: 544

About the Book

This book elaborates the basic and advanced concepts of cryptography and network security issues. It is user friendly since each chapter is modelled with several case studies and illustration. All algorithms are explained with various algebraic structures to map the theoretical concepts of cryptography with modern algebra. Moreover, all the concepts are explained with the secure multicast communication scenarios that deal with one to many secure communications.

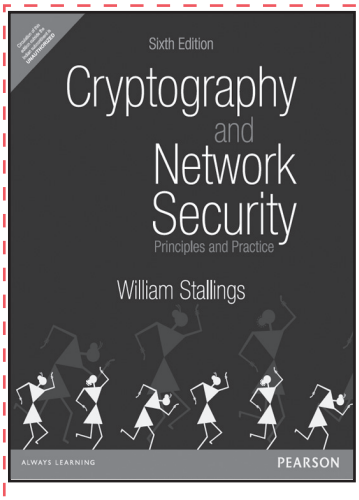
Features

- The theoretical model of cryptography and security concepts are explained using various algorithms
- Includes 10 case studies.
- All the algorithms are explained with reference to group theory.
- Includes Java implementation of all the well known private and public key crypto systems.
- This book supports many Secure Multicasting Algorithms.
- Includes 200 examples and 250 exercises.

Contents

About the Author

Dr. P. Vijaykumar, Assistant Professor in University College of Engineering Tindivanam.



Cryptography and Network Security: Principles and Practice, 6/e

William Stallings

ISBN: TBA | © Year: 2017 | Pages: 704

About the Book

Stallings' Cryptography and Network Security, Seventh Edition, introduces students to the compelling and evolving field of cryptography and network security. In an age of viruses and hackers, electronic eavesdropping, and electronic fraud on a global scale, security is paramount. The purpose of this book is to provide a practical survey of both the principles and practice of cryptography and network security. In the first part of the book, the basic issues to be addressed by a network security capability are explored by providing a tutorial and survey of cryptography and network security technology. The latter part of the book deals with the practice of network security: practical applications that have been implemented and are in use to provide network security.

Features

- Use of Sage to illustrate cryptographic algorithms: The Sage computer algebra system is used to provide numerous examples of cryptographic algorithms and is also used as the basis for numerous hands-on assignments.
- Comprehensive up-to-date survey of cryptographic algorithms. The student gains an understanding of all of important cryptographic algorithms and is able to assess their relative strengths and weaknesses.
- Complete coverage of authentication and digital signatures. Enables the student to compare and evaluate competing approaches, and thus understand each better.
- Comprehensive, up-to-date coverage of IP Security. IPSec is one of the most complex and one of the most important of the new network security standards.
- Comprehensive, up-to-date coverage of wireless network Security. The student gains an understanding of the importance of this topic.
- Comprehensive and unified discussion of intruders and viruses. The threats of intruders (hackers) and viruses are distinct, but there are also similarities.

Contents

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 18 titles, and counting revised editions, a total of 35 books on various aspects of these subjects. In over 20 years in the field, he has been a technical contributor, technical manager, and an executive with several high-technology firms. Currently he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge government research institutions. He has six times received the prize for best Computer Science and Engineering textbook of the year from the Textbook and Academic Authors Association.

Pearson

Network Security Essentials-Applications and Standards, 6/e

NEW

William Stallings

ISBN: TBA | © Year: 2017 | Pages: 432

About the Book

Network Securities Essentials: Applications and Standards introduces students to the critical importance of internet security in our age of universal electronic connectivity. Amidst viruses, hackers, and electronic fraud, organizations and individuals are constantly at risk of having their private information compromised. This creates a heightened need to protect data and resources from disclosure, guarantee their authenticity, and safeguard systems from network-based attacks.

The Sixth Edition covers the expanding developments in the cryptography and network security disciplines, giving students a practical survey of applications and standards. The text places emphasis on applications widely used for Internet and corporate networks, as well as extensively deployed internet standards.

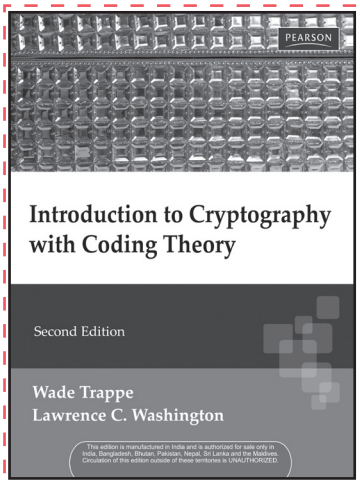
Features

- UPDATED! The text includes the most recent innovations in a comprehensive coverage of the field.
- UPDATED! Professors in the field have reviewed this book since the last edition to clarify and tighten the narrative and improve illustrations.
- NEW! Chapter on network access control includes a general overview of the topic plus discussions of the Extensive Authentication Protocol and IEEE 802.1X.
- NEW! Section on cloud security covers the security issues related to cloud computing.
- NEW! Online chapter on SHA-3 discusses the new cryptographic hash standard, which was adopted in 2012.
- NEW! Section on mobile device security introduces this essential aspect of enterprise network security.
- UPDATED! Chapter on malicious software now focuses on backdoor/rootkit malware more commonly installed by social engineering attacks, rather than more classic direct infections like viruses and worms.
- NEW! Sample Syllabi guide instructors in using the text for a limited amount of time.
- NEW! Learning Objectives begin each chapter.

Contents

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 18 titles, and counting revised editions, a total of 35 books on various aspects of these subjects. In over 20 years in the field, he has been a technical contributor, technical manager, and an executive with several high-technology firms. Currently he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge government research institutions. He has six times received the prize for best Computer Science and Engineering textbook of the year from the Textbook and Academic Authors Association.



Introduction to Cryptography With Coding Theory, 2/e

Wade Trappe • Lawrence C. Washington

ISBN: 9788131714768 | © Year: 2007 | Pages: 592

About the Book

With its lively, conversational tone and practical focus, this new edition mixes applied and theoretical aspects for a solid introduction to cryptography and security, including the latest significant advancements in the field.

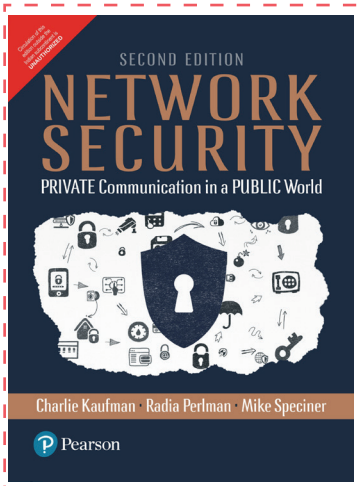
Features

- **Balances applied and theoretical aspects of security —** Presents applications and protocols where cryptographic primitives are used in practice, such as SET and SSL.
- **Coverage of Rijndael and AES —** Provides a detailed explanation of AES, which has replaced Feistel-based ciphers (DES) as the standard block cipher algorithm.
- **Coverage of practical applications of cryptography**

to security protocols — Connects the cryptographic tools developed earlier in the book to the building of real security tools, demonstrating to students that there is more to security and cryptography than just math.

- **Friendly, story-like discussion of security concepts —** Uses historical examples to illustrate the concepts of security and cryptanalysis by relating theory to easier-to-grasp events.
- **Modern methods such as Elliptic curves, Lattice methods, and Quantum Techniques —** Provides thorough coverage of topics that are becoming increasingly prominent in the field.
- **Major coverage of coding theory —** Offers a discussion of coding theory, which is often covered in today's cryptology courses.
- **Numerous example calculations —** Includes many examples, especially in purely mathematical chapters such as Ch. 3.
- **Public key certificate —** Provides an example of what an actual public key certificate looks like, rather than just describing it.
- Mathematica/Maple/Matlab problems and notebooks — Allow students to work with realistic sized examples in RSA and Digital Signatures, as well as classical cryptosystems and those with elliptic curves.
- **Practical examples and applications —** Give students hands-on experience with the large-numbered cryptography of today's security systems, and provides a discussion of security protocols.

Contents



Network Security: PRIVATE Communication in a PUBLIC World, 2/e

Radia Perlman • Charlie Kaufman • Mike Speciner

NEW

ISBN: 9789332578210 | © Year: 2017 | Pages: 672

About the Book

The first edition of Network Security received critical acclaim for its lucid and witty explanations of the inner workings of network security protocols. Honored by Network Magazine as one of the top 10 most useful networking books, it is now fully updated for the latest standards and technologies.

In the second edition, the authors draw on their considerable experience to illuminate all facets of information security, from the basics to advanced cryptography and authentication secure Web and email services and emerging security standards. The authors go far beyond documenting standards and technology: they contrast competing schemes, explain strengths and weaknesses, and identify the crucial errors most likely to compromise secure systems.

The highlights of the book's extensive new coverage include Advanced Encryption Standard (AES), IPsec, SSL, X.509 and related PKI standards, and Web security.

Contents

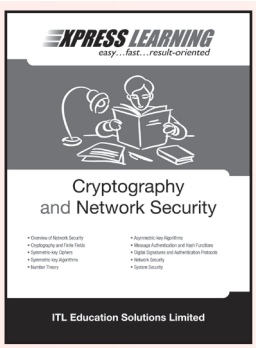
About the Authors

Charlie Kaufman

Radia Perlman

Mike Speciner

Also Available



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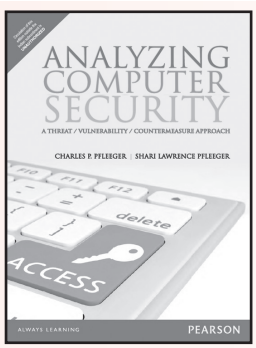
Pages: 196



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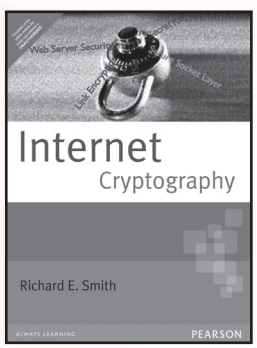

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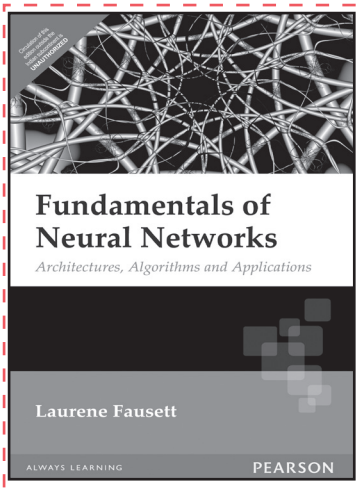


Fundamentals of Neural Networks: Architectures, Algorithms and Applications

Laurene Fausett

ISBN: 9788131700532 | © Year: 2004 | Pages: 480

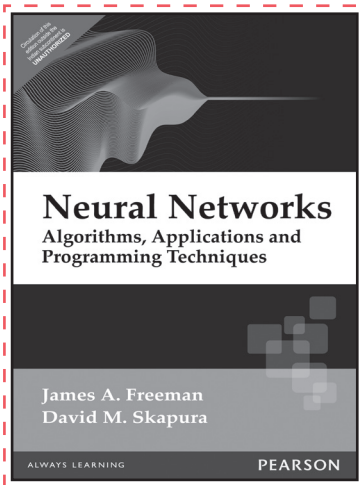
About the Book

An exceptionally clear, thorough introduction to neural networks written at an elementary level. Written with the beginning student in mind, the text features systematic discussions of all major neural networks and fortifies the reader's understudy with many examples.

Features

- Covers all major neural networks.
- Shows architectures in a similar format for all nets — illustrating the similarities and differences among them.
- Clarifies the differences in the capabilities of the different networks by focusing on simple problems — in many cases variations of a theme.
- Presents algorithms in enough detail to facilitate the writing of computer programs.
- Gives detailed examples of simple applications.
- Provides mathematical development when it provides a guide to proper implementation of a net.
- Includes exercises and 25 computer projects.

Contents



Neural Networks: Algorithms, Applications and Programming Techniques

James A. Freeman • David M. Skapura

ISBN: 9788131708088 | © Year: 2002 | Pages: 416

About the Book

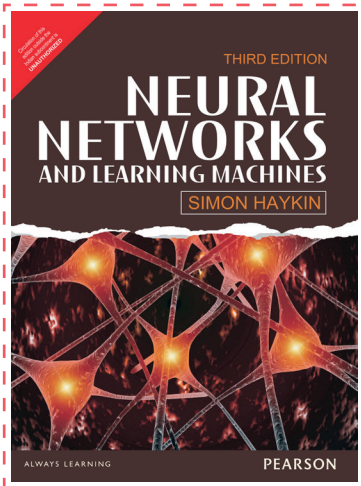
This Book provides a solid and practical introductions to neural networks—computational models inspired by the brain. The authors explain the basic concepts and technology underlying such models, then show how these models can be applied to the solution of diverse problems in science and engineering. The book's aim is not to explore every corner of current and future research, but to focus on what works and to present techniques useful for solving real problems.

Features

- A firm understanding of the operation of the specific networks presented.
- The ability to program simulations of those networks successfully.
- The ability to apply neural networks to real engineering and scientific problems.

Contents

1. Introduction to ANS Technology
2. Adaline and Madaline
3. Backpropagation
4. The BAM and the Hopfield Memory
5. Simulated Annealing
6. The Counterpropagation Network
7. Self-Organizing Maps
8. Adaptive Resonance Theory
9. Spatiotemporal Pattern Classification
10. The Neocognition



Neural Networks and Learning Machines

Simon Haykin

NEW

ISBN: 9789332570313 | © Year: 2016 | Pages: 944

About the Book

Refocused, revised and renamed to reflect the duality of neural networks and learning machines, this edition recognizes that the subject matter is richer when these topics are studied together. Ideas drawn from neural networks and machine learning are hybridized to perform improved learning tasks beyond the capability of either independently.

Features

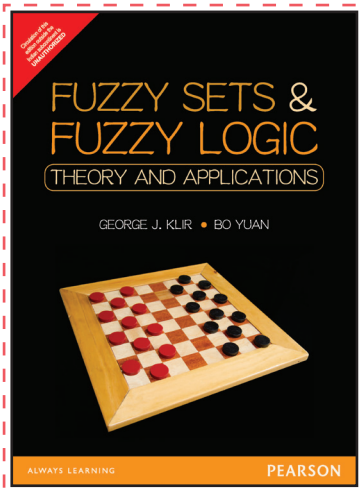
- Computer-oriented experiments distributed throughout the text.
- Extensive, state-of-the-art coverage exposes students to the many facets of neural networks and helps them appreciate the technology's capabilities and potential applications.
- Reinforces key concepts with chapter objectives, problems, worked examples, a bibliography, photographs, illustrations, and a thorough glossary.
- Explores the intricacies of the learning process—an essential component for understanding neural networks.
- Considers recurrent networks, such as Hopfield networks, Boltzmann machines, and meanfield theory machines, as well as modular networks, temporal processing, and neurodynamics.
- Integrates computer experiments throughout, giving students the opportunity to see how neural networks are designed and perform in practice.
- Information-theoretic learning models, including copulas, independent components analysis (ICA), coherent ICA, and information bottleneck.
- Stochastic dynamic programming, including approximate and neurodynamic procedures.
- Recurrent neural networks trained using sequential-state estimation algorithms.

Contents

1. Rosenblatt's Perceptron
2. Model Building through Regression
3. The Least-Mean-Square Algorithm
4. Multilayer Perceptrons
5. Kernel Methods and Radial-Basis Function Networks
6. Support Vector Machines
7. Regularization Theory
8. Principal-Components Analysis
9. Self-Organizing Maps
10. Information-Theoretic Learning Models
11. Stochastic Methods Rooted in Statistical Mechanics
12. Dynamic Programming
13. Neurodynamics
14. Bayseian Filtering for State Estimation of Dynamic Systems
15. Dynamically Driven Recurrent Networks

About the Author

Simon Haykin, McMaster University, Ontario Canada



Fuzzy Sets and Fuzzy Logic: Theory and Applications

George J. Klir • Bo Yuan

ISBN: 9789332549425 | © Year: 2015 | Pages: 592

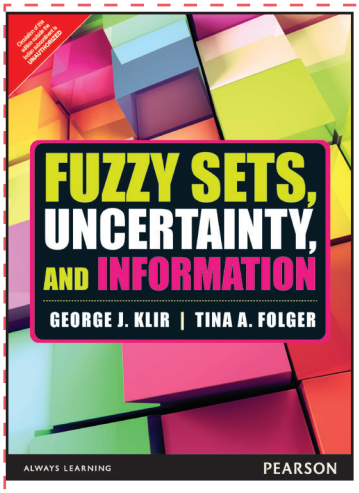
About the Book

Reflecting the tremendous advances that have taken place in the study of fuzzy set theory and fuzzy logic from 1988 to the present, this book not only details the theoretical advances in these areas, but considers a broad variety of applications of fuzzy sets and fuzzy logic as well.

Features

- Details the advances that have taken place in fuzzy set theory and fuzzy logic in recent years.
- Requires only a basic knowledge of classical (nonfuzzy) set theory, classical (two-valued) logic, and probability theory.
- Includes all bibliographical, historical, and other side remarks in the notes that follow each individual chapter.
- Includes a set of exercises after each chapter.
- Offers an overview of neural networks, genetic algorithms, and rough sets in Appendices A-C.
- Includes a glossary of key concepts and a glossary of symbols.

Contents



Fuzzy Sets, Uncertainty, and Information

George J. Klir • Tina A. Folger

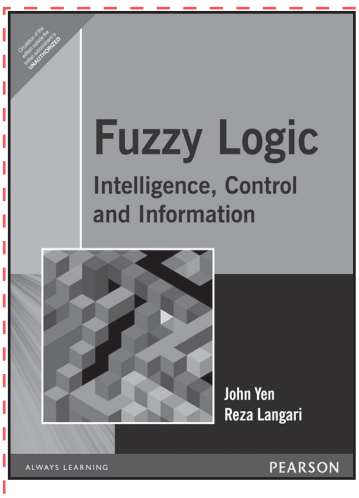
ISBN: 9789332550001 | © Year: 2015 | Pages: 368

About the Book

The concept of uncertainty and its relationship to the increasingly important concept of information and complexity need to be brought under a new mathematical formulation. This book is intended to make an understanding of this mathematical formalism accessible to students and professionals in a broad range of disciplines and covers the various issues of uncertainty, information and complexity from a broad perspective based on formalism of fuzzy set theory. No prior knowledge of fuzzy set theory or information theory is required; the reader is however assumed to be familiar with basic notions of set theory, logic and probability theory, though the fundamentals of these subject areas are briefly over viewed in the book.

The book is suitable as a text at the advanced under-graduate/postgraduate level that covers uncertainty, information and complexity from a broad perspective in mathematics courses in artificial intelligence, engineering and computer science.

Contents



Fuzzy Logic: Intelligence, Control and Information

John Yen • Reza Langari

ISBN: 9788131705346 | © Year: 2002 | Pages: 532

About the Book

This text is appropriate for an undergraduate electrical engineering course in fuzzy logic. Providing equal emphasis on theoretical foundations and practical issues, this book features fuzzy logic concepts and techniques in intelligent systems, control, and information technology.

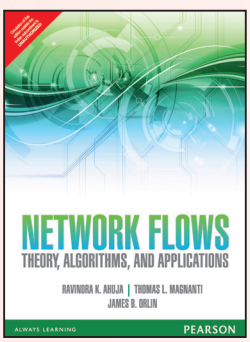
Features

- Comprehensive and up-to-date coverage.
- Provides examples and exercises that are related to real world problems.
- Uses Fuzzy Logic Toolbox for MATLAB™ to demonstrate exemplar applications and to develop hands-on exercises.
- Provides design guidelines and design methods for developing fuzzy logic applications.
- Provides a modern perspective of the fuzzy logic technology.
- Introduces core concepts and techniques gently in two steps.
- Provides relevant background material so that students from a wide range of disciplines can easily understand the text.

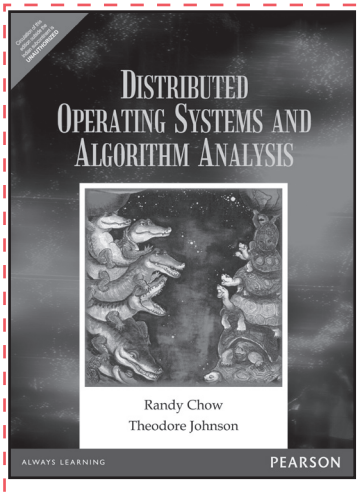
- Introduces the connection between fuzzy logic and related ideas, methods, and theories developed in other disciplines (e.g., artificial intelligence, probability theory, control, model identification, etc).
- Summarizes key concepts at the end of each chapter.
- Highlights motivations and benefits of employing fuzzy logic in control engineering and information systems.
- Discussion of open research issues and their implications.
- Advanced topics are separated from the basic material in the chapter that immediately follows.

Contents

Available Title in Network Programming



ISBN: 9789332535152
Pages: 864



Distributed Operating Systems and Algorithm Analysis

Randy Chow • Theodore Johnson

ISBN: 9788131728598 | © Year: 2009 | Pages: 550

About the Book

This book integrates the theory and practice of distributed operating systems and algorithms. It combines coverage of distributed operating systems and distributed algorithms, allowing instructors to cover the algorithms involved in distributed operating systems with optional depth as desired and motivate the study of distributed algorithms by showing how they are applied in operating systems. Currently all books treat these as separate topics. This text includes coverage of parallel systems, distributed systems, real-time systems, computer networks and algorithms for asynchronous distributed systems, and uses examples from many commercial and experimental operating systems. Included in the book are a number of programming projects.

Features

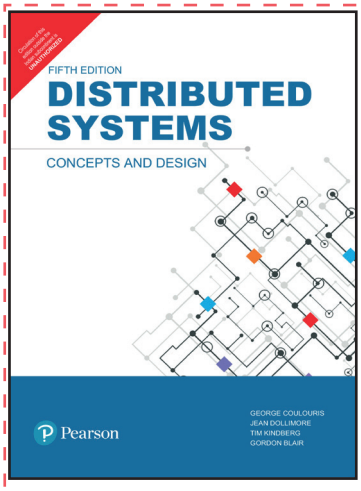
- Integrates and balances coverage of the advanced aspects of operating systems with the distributed algorithms used by these systems.
- Includes extensive references to commercial and experimental systems to illustrate the concepts and implementation issues.
- Provides precise algorithm description and explanation of why these algorithms were developed.
- Structures the coverage of algorithms around the creation of a framework for implementing a replicated server-a prototype for implementing a fault-tolerant and highly available distributed system.
- Contains programming projects on such topics as sockets, RPC, threads, and implementation of distributed algorithms using these tools.
- Includes an extensive annotated bibliography for each chapter, pointing the reader to recent developments.

Contents

About the Authors

Randy Chow is a professor of Computer and Information Science and Engineering at the University of Florida. His research interests include computer networks, distributed systems, computer security, and system performance evaluation.

Theodore Johnson is a member of the technical staff at the Database Research department of AT&T Labs-Research. Previously, he was a professor of Computer and Information Science and Engineering at the University of Florida. His research interests include distributed systems, databases, and performance modeling.



Distributed Systems: Concepts and Design, 5/e

George Coulouris • Jean Dollimore • Tim Kindberg

ISBN: 9789332575226 | © Year: 2017 | Pages: 944

New Edition

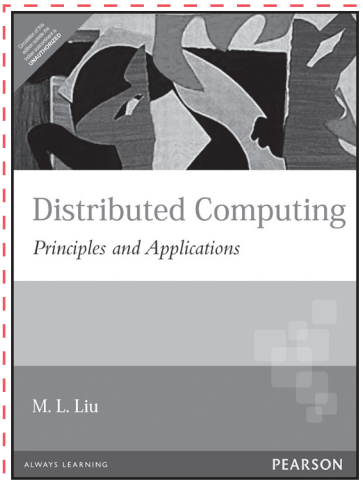
About the Book

Broad and up-to-date coverage of the principles and practice in this fast moving area. Includes the key issues in the debate between components and web services as the way forward for industry. The depth of coverage will enable students to evaluate existing distributed systems and design new ones.

Features

- Three entirely new chapters on Peer-to-Peer Systems, Web Services, and Mobile and Ubiquitous Systems.
- More than 25 detailed case studies of well-known systems, 8 of them new including studies of the Grid, Cooltown, Bluetooth andthe (in)security of the WiFi WEP protocol.
- Updated coverage of XML and its security extensions, the Advanced Encryption Standard and security design for ubiquitous systems.

Contents



Distributed Computing: Principles and Applications

M.L. Liu

ISBN: 9788131713327 | © Year: 2004 | Pages: 448

About the Book

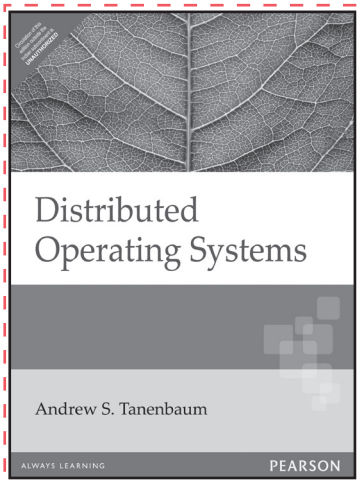
Distributed Computing provides an introduction to the core concepts and principles of distributed programming techniques. It takes a "how-to" approach where students learn by doing. Designed for students familiar with Java, the book covers programming paradigms, protocols, and application program interfaces (API's), including RMI, COBRA, IDL, WWW, and SOAP. Each chapter introduces a paradigm and/or protocol, and then presents the use of a DPI that illustrates the concept. The presentation uses narrative, code examples, and diagrams designed to explain the topics in a manner

that is clear and concise. End-of-chapter exercises provide analytical as well as hands-on exercises to prompt the reader to practice the concepts and the use of API's covered throughout the text. Using this text, students will understand and be able to execute, basic distributed programming techniques used to create network services and network applications, including Internet applications.

Features

- Contains a concise, hands-on introduction to distributed programming using the latest technologies.
- Uses extensive programming and self-check exercises to help convey and reinforce basic ideas.
- Relates the concepts and technologies to real world applications through sidebars of news articles.
- Includes supplementary Web site with programming samples, sample lab exercises, test questions, and links.

Contents



Distributed Operating Systems

Andrew S. Tanenbaum

ISBN: 9788177581799 | © Year: 2002 | Pages: 608

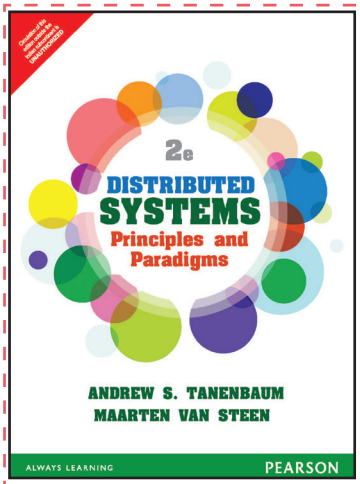
About the Book

As distributed computer systems become more pervasive, so does the need for understanding how their operating systems are designed and implemented. Andrew S. Tanenbaums **Distributed Operating Systems** fulfills this need. Representing a revised and greatly expanded Part II of the best-selling Modern Operating Systems, it covers the material from the original book, including communication, synchronization, processes, and file systems, and adds new material on distributed shared memory, real-time distributed systems, fault-tolerant distributed systems, and ATM networks. It also contains four detailed case studies: Amoeba, Mach, Chorus, and OSF/DCE. Tanenbaums trademark writing provides readers with a thorough, concise treatment of distributed systems.

Features

- Offers the most up-to-date coverage of emerging techniques and technology, including the only coverage of Distributed Shared Memory available to date.
- Provides four detailed case studies of actual distributed systems, including:
  - -Amoeba
  - -Mach
  - -Chorus
  - -DCE
- Supports narrative with a strong pedagogical framework, including:
  - -over 250 figures
  - -over 200 references
  - -suggested readings
  - -nearly 200 problems
- New material on distributed real-time systems.
- New material on ATM.
- New material on fault-tolerance.

Contents



Distributed Systems: Principles and Paradigms, 2/e

Andrew S Tanenbaum • Maarten Van Steen

ISBN: 9789332549807 | © Year: 2015 | Pages: 704

About the Book

Very few textbooks today explore distributed systems in a manner appropriate for university students. In this unique text, esteemed authors Tanenbaum and van Steen provide full coverage of the field in a systematic way that can be readily used for teaching. No other text examines the underlying principles – and their applications to a wide variety of practical distributed systems – with this level of depth and clarity.

Features

- First part of the book dedicates one chapter to each of seven key principles of all distributed systems: communication, processes, naming, synchronization, consistency and replication, fault tolerance, and security.
- Second part of the book devoted to real-world distributed case studies.
- Numerous end-of-chapter exercises – Explain how the various principles of distributed systems work in practice.
- "Big picture" concepts and many technical details.
- Excellent coverage of timely, advanced distributed systems topics – Examines security, payment systems, recent Internet and Web protocols, scalability, and caching and replication.

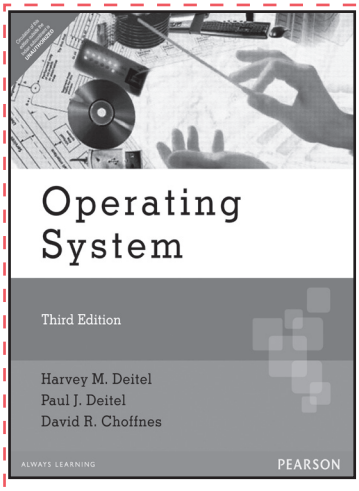
Contents

About the Authors

Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. He is also Dean of the Advanced School for Computing and Imaging, an interuniversity graduate school doing research on advanced parallel, distributed, and imaging systems. Nevertheless, he is trying very hard to avoid turning into a bureaucrat.

Prof. Tanenbaum is a Fellow of the ACM, a Fellow of the IEEE, a member of the Royal Netherlands Academy of Arts and Sciences, winner of the 1994 ACM Karl V. Karlstrom Outstanding Educator Award, and winner of the 1997 ACM/SIGCSE Award for Outstanding Contributions to Computer Science Education. He is also listed in Who's Who in the World.

Maarten van Steen is a professor at the Vrije Universiteit, Amsterdam where he teaches operating systems, computer networks, and distributed systems. He has also given various highly successful courses on computer systems related subjects to ICT professionals from industry and governmental organizations.



Operating System, 3/e

Harvey M. Deitel • Paul J. Deitel • David R. Choffnes

ISBN: 9788131712894 | © Year: 2007 | Pages: 1270

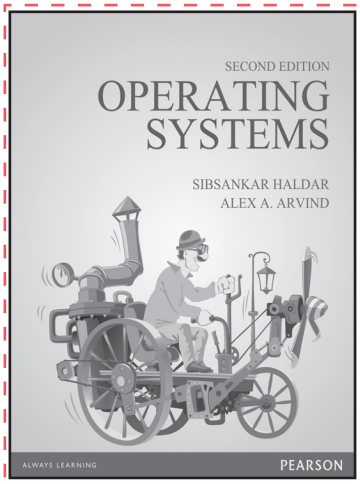
About the Book

For one- and two-semester **Operating Systems** courses (in the most recent ACM/IEEE curriculum) that universities offer to juniors, seniors and graduate Computer Science students. The text goes beyond the standard coverage in operating systems courses with key chapters on multiprocessing, networking, distributed systems, performance, and security. The text features extensive, up-to-the-minute case studies on the latest versions of Linux (2.6) and Microsoft Windows XP. An abundance of charts, diagrams, illustrations and exercises (both with and without solutions) is included.

Features

- Conforms to all core requirements and elective topics of the IEEE/ACM's CC2001 Operating Systems course (except for shell scripting).
- Approximately 300 charts, tables and illustrations and extensive Web resources in every chapter.
- Hundreds of self-review questions and answers (two after each section).
- End-of-chapter and end-of-book glossaries with approximately 1800 terms defined.
- Pseudocode in C/C++/Java-like syntax.
- Works Cited section at the end of every chapter.
- Multithreading treatments in pseudocode and Java.
- 100+ page case studies of Linux 2.6 and Windows XP 100+.
- Mini case studies on key operating systems.
- Biographic features on key operating systems people.
- "Operating Systems Thinking" features.
- Anecdotes.

Contents



Operating Systems, 2e

Sibsankar Haldar • Alex A. Aravind

ISBN: 9789332500303 | © Year: 2014 | Pages: 840

About the Book

Designed to meet the needs of undergraduate computer science students, Operating Systems follows the principle of top-down design and bottom-up development. The discussion of key concepts with few references to technologies helps the reader grasp the fundamentals easily.

Features

- Platform-independent, in-depth discussion of fundamental concepts.
- Lucid explanation of the solutions to the problem of process synchronization.
- An overview chapter that introduces relevant concepts and related terms.
- Running marginalia that presents additional information without disrupting the continuity of the text.
- Two detailed technological case studies, on Linux 2.6 and Microsoft Windows XP.
- Over 650 end-of-chapter questions and exercises.

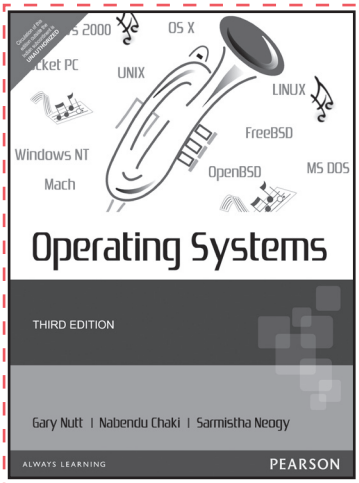
Contents

About the Authors

Sibsankar Haldar obtained his B.E. in electrical engineering from Bengal Engineering College (now Bengal Engineering and Science University) in 1984. He went on to receive his M.Tech. in computer science and engineering from the Indian Institute of Technology Kanpur in 1986, and Ph.D. from the Department of Computer Science and Automation, the Indian Institute of Science, Bangalore in 1990. From 1987 to 1990, he also served as a scientific officer in the same department where he taught courses in programming languages, databases, and operating systems. As an academic, he was for many years, affiliated with several prominent institutes as the Memorial University of Newfoundland, Canada; Utrecht University and Centrum Wiskunde & Informatica, the Netherlands; Ecole Polytechnic, France; Tata Institute of Fundamental Research, Mumbai; and Indian Statistical Institute, Kolkata. In 1997, Dr Haldar shifted to the industry to work with Axes Technologies, Bangalore. He also worked with various organizations like Nortel Networks, Canada; Lucent Technologies Bell Laboratories, USA; Timesten (now a part of Oracle),USA; Nucleodyne, USA; and Motorola (later Motorola Mobility) before joining Oracle in 2012.

Alex A. Ara.vind is currently a professor in the department of computer science at the University of Northern British Columbia (UNBC), Canada. An alumnus of the Indian Institute of Technology Kharagpur from where he obtained his M.Tech. in computer science, Dr Aravind received his Ph.D. from the Indian Institute of Science. He worked as a scientific offer in the Supercomputer Education and Research Centre (SERC), Indian Institute of Science, Bangalore during 1996–1997. Then he moved to Canada having obtained a post-doctoral fellowship at the Memorial University of Newfoundland, St. John's in 1997.

Dr. Aravind joined the UNBC in 1999 where he teaches operating systems. From UNBC, Alex has received teaching excellence award, in 2012, and research excellence award, in 2013. His areas of research interest include operating systems, concurrent and distributed computing, and wireless sensor networks. He has published several research articles in leading journals and conferences, and supervised graduate students. A member of the Association for Computing Machinery (ACM), Institute of Electrical and Electronics Engineers (IEEE), and the Society for Computer Simulation International (SCS), Dr Aravind has chaired a number of conference sessions, organized workshops, and delivered invited talks.



Operating Systems, 3/e

Gary Nutt • Nabendu Chaki • Sarmistha Neogy

ISBN: 9788131723593 | © Year: 2009 | Pages: 856

About the Book

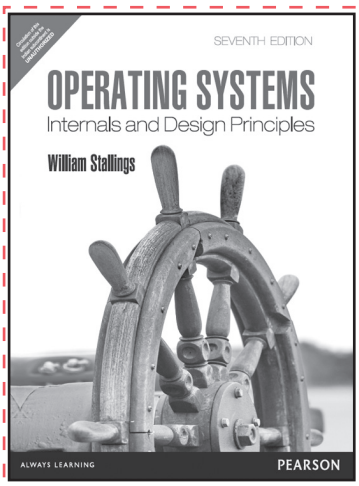
Operating Systems, Third Edition, has become a market leader by striking a balance between introducing the basic principles and putting examples from Linux, UNIX, and Windows into practice. The book promotes an understanding of contemporary operating system concepts and how they are applied today. This edition gives more breadth to the coverage of operating system principles and more opportunities for readers to see and work with real-world examples.

Features

- Uses the most common operating systems, including Linux, UNIX, and Windows.
- Contains overall design enhancements to facilitate students¡¦ understanding. This includes a further focus on principles and an expanded art program.
- Contains more Labs! More exercises than in the previous edition are included to give students substantial hands-on experience with Linux, UNIX, and Windows.
- Is updated and enhanced with the latest information on.

Contents

1. Introduction
2. Operating System Architecture
3. Processes and Threads
4. Scheduling
5. Basic Synchronization Principles
6. High-level Synchronization and Interprocess Communication
7. Deadlock
8. Basic Memory Management
9. Basic Virtual Memory
10. Device Management
11. File Management
12. Protection and Security
13. Networks
14. Distributed System Overview
15. Distributed File Systems
16. Distributed Programming Runtime Systems
17. Design Strategies
18. The Linux Kernel
19. The Windows NT/2000/XP Kernel



Operating Systems: Internals and Design Principles, 7/e

William Stallings

ISBN: 9789332518803 | © Year: 2013 | Pages: 708

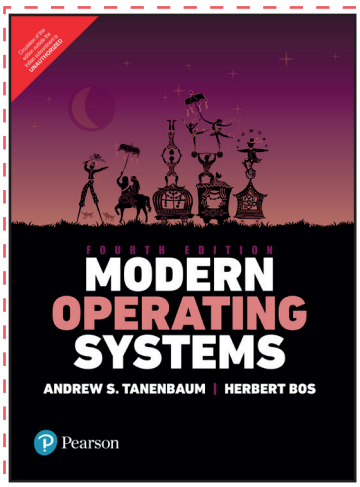
About the Book

Operating Systems: Internals and Design Principles provides a comprehensive and unified introduction to operating systems topics. Stallings emphasizes both design issues and fundamental principles in contemporary systems and gives readers a solid understanding of the key structures and mechanisms of operating systems. He discusses design trade-offs and the practical decisions affecting design, performance and security. The book illustrates and reinforces design concepts and ties them to real-world design choices through the use of case studies in UNIX and Windows.

Features

- Running case studies focused on how specific operating systems implement specific concepts are embedded throughout the text instead of end of book case studies. This enhances the student understanding of relevant concepts at the point of study.
- A copy of all algorithms in an easy-to-read Pascal pseudocode is available on the author's Web site.
- Several types of projects are supported by the text, including.
- Simulations, which students access via the Web, with no programming or platform involved.
- Small projects, designed to take a week or two to complete.
- Two major programming projects, one to build a shell (or command line interpreter) and one to build a process dispatcher, are included. The text describes the projects, and step-by-step exercises are included at the Instructors Resource Center. The exercises can be uploaded to the instructor's Web site.
- A more extensive set of seven programming projects provide for more substantial two-person assignments
- Projects are evenly split between system-level projects and kernel-level projects.
- Detailed treatment of threads — one of the most important developments in operating systems — is included. The text helps students to understand the relationship between process and thread and the way in which threads are managed and used.
- A unique comprehensive treatment of scheduling covers key recent developments in scheduling theory and design in the areas of multiprocessor scheduling and real-time scheduling.
- Comprehensive, unified treatment of I/O offers broad and thorough coverage of this critical part of any operating system.
- Is updated and enhanced with the latest information on.

Contents



Modern Operating Systems, 4e

Andrew S Tanenbaum • Herbert Bos

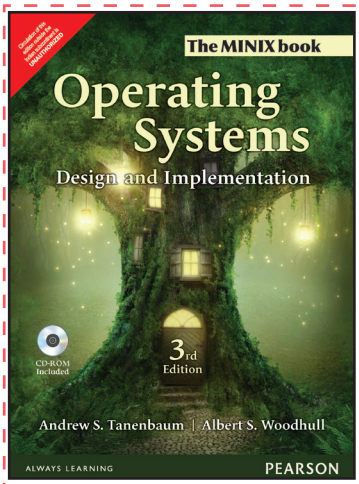
NEW

ISBN: 9789332575776 | © Year: 2016 | Pages: 1136

About the Book

Modern Operating Systems, Fourth Edition, is intended for introductory courses in Operating Systems in Computer Science, Computer Engineering, and Electrical Engineering programs.

The widely anticipated revision of this worldwide best-seller incorporates the latest developments in operating systems (OS) technologies. The Fourth Edition includes up-to-date materials on relevant OS. Tanenbaum also provides information on current research based on his experience as an operating systems researcher.



Operating Systems: Design and Implementation, 3/e

Andrew S. Tanenbaum • Albert S. Woodhull

ISBN: 9789332550513 | © Year: 2015 | Pages: 1080

About the Book

Revised to address the latest version of MINIX (MINIX 3), this streamlined, simplified new edition remains the only operating systems text to first explain relevant principles, then demonstrate their applications using a Unix-like operating system as a detailed example. It has been especially designed for high reliability, for use in embedded systems, and for ease of teaching.

Features

- Accompanying CD-ROM with the latest version of MINIX and simulators for running MINIX on other systems – A small, easy-to-understand highly reliable operating system is available for study; unique to this text.
- Relevant sections of MINIX code are described in detail in most chapters – Provides problems at the end of each chapter, with separate solutions manual for the instructor.
- Simulators for running MINIX on other systems are available.
- MINIX includes networking based in TCP/IP – the full source code of the MINIX TCP/IP implementation is included on the CD-ROM.

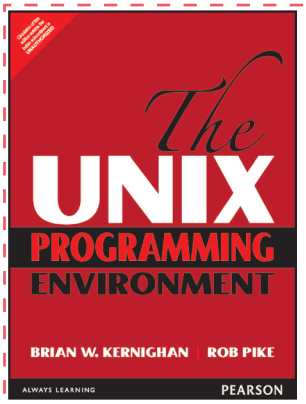
Contents

About the Authors

Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. He is also Dean of the Advanced School for Computing and Imaging, an interuniversity graduate school doing research on advanced parallel, distributed, and imaging systems.

Prof. Tanenbaum is a Fellow of the ACM, a Fellow of the IEEE, a member of the Royal Netherlands Academy of Arts and Sciences, winner of the 1994 ACM Karl V. Karlstrom Outstanding Educator Award, and winner of the 1997 ACM/SIGCSE Award for Outstanding Contributions to Computer Science Education. He is also listed in Who's Who in the World.

Albert S. Woodhull was a faculty member in the School of Natural Science, Hampshire College, Amherst, MA for many years. He has taught at the University of Massachusetts and Smith College in the US, and he has been a visiting faculty member on multiple occasions at universities in Nicaragua, supported on two of these visits by Fulbright grants. He also served as a computer and network system administrator at the University of Massachusetts. He holds an B.S. degree from M.I.T. and a Ph.D. from the University of Washington. His home page on the web is at http://minix1.woodhull.com/asw/.



The UNIX Programming Environment

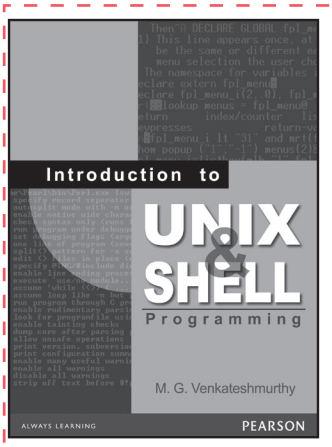
Brain W. Kernighan • Rob Pike

ISBN: 9789332550254 | © Year: 2015 | Pages: 368

About the Book

Designed for first-time and experienced users, this book describes the UNIX® programming environment and philosophy in detail. Readers will gain an understanding not only of how to use the system, its components, and the programs, but also how these fit into the total environment.

Contents



Introduction to Unix & Shell Programming

M. G. Venkateshmurthy

ISBN: 9788177587456 | © Year: 2005 | Pages: 392

About the Book

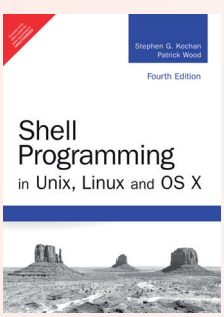
Introduction to Unix and Shell Programming is designed to be an introductory first level textbook for a course on Unix. Organised into twelve simple chapters the book guides the students from the basic introduction to the Unix operating system and extends upto Unix system administration.

Features

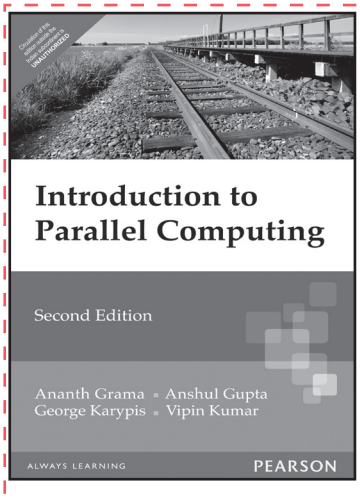
- Simple and concise presentation.
- Rich in peadagogy with lucid style of writing.
- Chapter objectives provided for all the chapters.
- An Introduction to Perl programming provided.

Contents

Also Available



ISBN: 9789332582743
Pages: 416



Introduction to Parallel Computing, 2/e

Ananth Grama • Vipin Kumar • Anshul Gupta
George Karypis

ISBN: 9788131708071 | © Year: 2004 | Pages: 656

About the Book

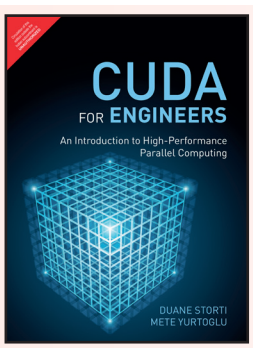
Introduction to Parallel Computing, 2e provides a basic, in-depth look at techniques for the design and analysis of parallel algorithms and for programming them on commercially available parallel platforms. The book discusses principles of parallel algorithms design and different parallel programming models with extensive coverage of MPI, POSIX threads, and Open MP. It provides a broad and balanced coverage of various core topics such as sorting, graph algorithms, discrete optimization techniques, data mining algorithms, and a number of other algorithms used in numerical and scientific computing applications.

Features

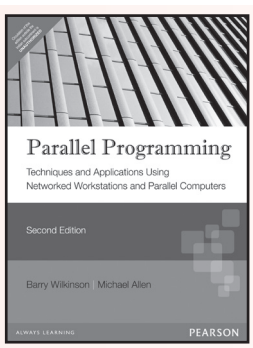
- Complete end-to-end source of information on almost all aspects of parallel computing.
- Complete coverage of traditional Computer Science algorithms, scientific computing algorithms, and data inverse algorithms.
- Modular nature of the book's presentation enables instructors to teach a variety of undergraduate and graduate level courses.
- Chapter on principles of parallel programming lays out the basis for abstractions that capture critical features of the underlying architecture of algorithmic portability.
- Chapter on programming paradigms introduces standardized programming models such as MPI, POSIX threads, and OpenMP.
- Provides an emphasis on portability.

Contents

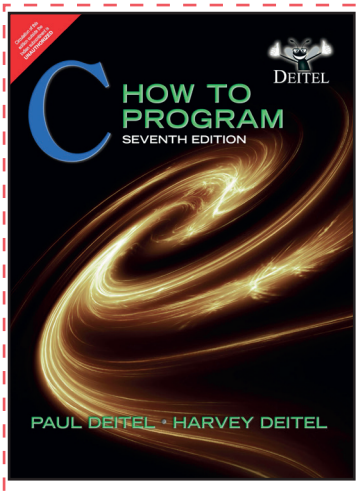
Also Available



ISBN: 9789332570948
Pages: 352



ISBN: 9788131702390
Pages: 488



C How to Program, 7/e

Paul Deitel • Harvey Deitel

ISBN: 9789332555310 | © Year: 2015 | Pages: 976

About the Book

The best-selling C++ How to Program is accessible to readers with little or no programming experience, yet comprehensive enough for the professional programmer. The Deitels' signature live-code approach presents the concepts in the context of full working programs followed by sample executions. The early objects approach gets readers thinking about objects immediately—allowing them to more thoroughly master the concepts. Emphasis is placed on achieving program clarity and building well-engineered software. Interesting, entertaining, and challenging exercises encourage students to make a difference and use computers and the Internet to work on problems. To keep readers up-to-date with leading-edge computing technologies, the Tenth Edition conforms to the C++11 standard and the new C++14 standard.

Features

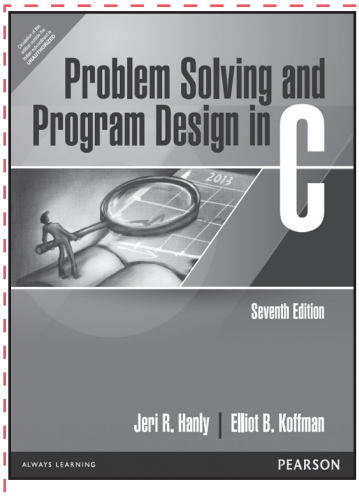
- Focus on object-oriented programming.
- Enhance learning with outstanding pedagogical features.
- Rich, early coverage of C++ fundamentals.
- Interesting, entertaining, and challenging exercises.

Contents

About the Authors

Paul Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., has over 30 years of experience in computing. He is a graduate of MIT, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer designations and is an Oracle Java Champion. He and his co-author, Dr. Harvey Deitel, are the world's best-selling programming-language textbook/ professional book/video authors.

Dr. Harvey Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has over 50 years of experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees in Electrical Engineering from MIT and a Ph.D. in Mathematics from Boston University–he studied computing in each of these programs before they spun off Computer Science programs.



Problem Solving and Program Design in C, 7/e

Jeri R. Hanly • Elliot B. Koffman

ISBN: 9789332518810 | © Year:2013 | Pages: 840

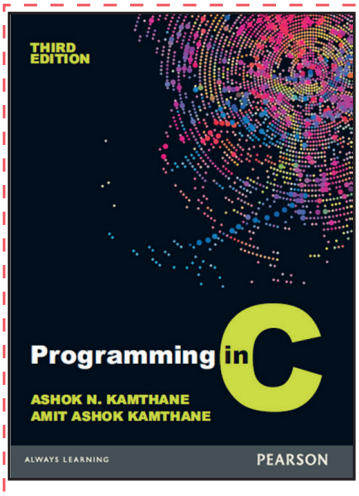
About the Book

Problem Solving and Program Design in C is one of the best-selling introductory programming textbooks using the C programming language. It embraces a balanced approach to program development and an introduction to ANSI C. The book provides a gradual introduction to pointers and covers programming with functions early in the text. In later chapters, students learn to implement fundamental data structures such as lists, stacks, queues, and trees in a language that fosters their understanding of stack- and heap-dynamic memory allocation and programmer-controlled pointers. To enhance students' learning experience it offers the right amount of pedagogical features that include end-of-section and chapter exercises, examples and case studies, syntax and program style display boxes, error discussions and end-of-chapter projects.

Features

- Gradual introduction to pointers with a consistent emphasis on the connection between problem solving skills and effective software development.
- Early coverage of functions, logical operators, and operators with side effects.
- Chapter 0 explains the various fields of study in CS, as well as the career paths available to those who major in CS-related disciplines.
- Inclusion of advanced programming topics in the "Multiprocessing Using Processes and Threads" chapter.
- "On to C++" chapter provides an introduction to the C++ programming language.
- End-of-section and end-of-chapter exercises, case studies and end-of-chapter projects offer practical learning opportunities at relevant points in the text.
- A glossary provides quick access to important computing terms.

Contents



Programming in C, 3/e

Ashok N. Kamthane • Amit Ashok Kamthane

ISBN0: 9789332543553 | © Year: 2015 | Pages: 688

About the Book

C is one of the most popular programming languages. It runs on most software platforms and computer architecture. This revised edition of our best-selling text Programming in C not only maintains the exclusivity of previous editions but also enhances it with the addition of new programs and illustrations. Challenging concepts are supported with numerous solved and unsolved programs. The new chapter on computer graphics ensures that this book comprehensively covers the syllabi of most universities. The book also uses the Turbo C compiler, which is the most widely used C compiler.

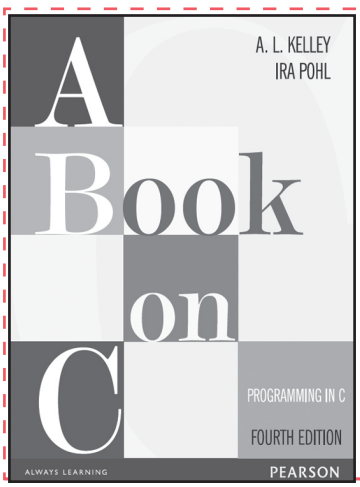
Features

- New flowcharts and diagrams.
- Online more than 100 programs Fully tested and executed programs.
- Chapter on Computer Graphics.

Contents

About the Author

Ashok N. Kamthane is associate professor in Electronics and Telecommunication Engineering Department at SGGS Institute of Engineering and technology, Nanded, Maharashtra. He has over 32 years teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines.



A Book on C, 4/e

A. L. Kelley • Ira Pohl

ISBN: 9788131724347 | Pages: 748

About the Book

Now in its fourth edition, A Book on C retains the features that have made it a proven best-selling tutorial and reference on the ANSI C programming language. This edition builds on the many existing strength of the text to improve, update, and extend the coverage of C, and now includes information on transitioning to Java and C++ from C.

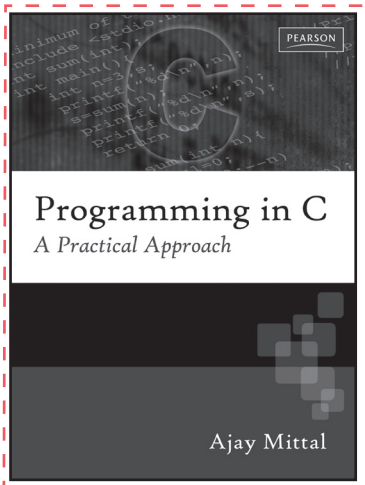
Features

- New and updated programming examples and dissections—the authors' trademark technique for illustrating and teaching language concepts.
- Recursion is emphasized with revised coverage in both text and exercises.
- Multifile programming is given greater attention, as are the issues of correctness and type safety. Function prototypes are now used throughout the text.
- Abstract Data Types, the key concept necessary to understanding objects are carefully covered.
- Updated material on transitioning to C++, including coverage of the important concepts of object-oriented programming.
- New coverage is provided on transitioning from C to Java.
- References to key programming functions and C features are provided in convenient files.

Contents

About the Authors

A.L. Kelley and **Ira Pohl** are professors of computer science at the University of California, Santa Cruz.



Programming in C: A Practical Approach

Ajay Mittal

ISBN: 9788131729342 | © Year: 2010 | Pages: 764

About the Book

This book on C Programming has a perfect blend of theory as well as practicals. The presentation is in such a way that helps the readers to learn the concepts through practice and programming.

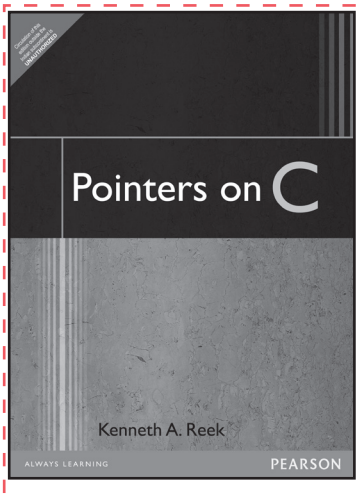
Features

- The book discusses the behavior of the programs with regards to compilers like Borland Turbo C 3.0, Borland Turbo C 4.5 and MS VC++ 6.0.
- The book contains over 200 find the output, 300 MCQs.
- 60 programming exercises and over 450 test yourself questions to test the student's understanding.
- More than 150 solved programs.
- Programs explained alongwith flowcharts and algorithms.

Contents

About the Author

Ajay Mittal is an Assistent Professor at the Dept. of Computer Science and Engineering, PEC University of Technology, Chandigarh. He has an experience of over 10 yrs in teaching C Programming and analysis and design of algorithm.



Pointers on C

Kenneth A. Reek

ISBN: 9788131715840 | © Year: 2007 | Pages: 640

About the Book

Designed for professionals and advanced students, Pointers On C provides a comprehensive resource for those needing in-depth coverage of the C programming language. An extensive explanation of pointer basics and a thorough exploration of their advanced features allow programmers to incorporate the power of pointers into their C programs.

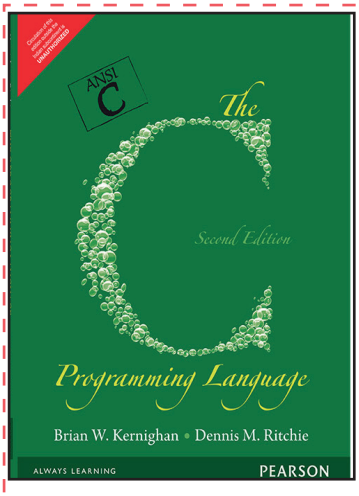
Features

- Provides complete background information needed for a thorough understanding of C.
- Covers pointers thoroughly, including syntax, techniques for their effective use and common programming idioms in which they app Paperbackear.
- Compares different methods for implementing common abstract data structures.
- Offers an easy, conversant writing style to clearly explain difficult topics, and contains numerous illustrations and diagrams to help visualize complex concepts.
- Includes Programming Tips, discussing efficiency, portability, and software engineering issues, and warns of common pitfalls using Caution! Sections.

Contents

About the Author

Kenneth A. Reek, Professor of Computer Science at Rochester Institute of Technology, is an experienced C programmer who has served as a consultant for local industries.



The C Programming Language, 2/e

Brian W. Kernighan

ISBN: 9789332549449 | © Year: 2015 | Pages: 284

About the Author

This second edition describes C as defined by the ANSI standard. This book is meant to help the reader learn how to program in C. The book assumes some familiarity with basic programming concepts like variables, assignment statements, loops, and functions. A novice programmer should be able to read along and pick up the language.

Features

- all examples have been tested, which is in machine-readable form.
- it discusses various aspects of C in more detail, although the emphasis is on examples of complete programs, rather than isolated fragments.
- it deals with basic data types, operators and expressions.
- covers functions and program structure, external variables, scope rules, multiple source files, and also touches on the preprocessor.
- it also describes an interface between C programs and the UNIX operating system, concentrating on input/output, the file system, and storage allocation.
- it also provides a language reference manual. The official statement of the syntax and semantics of C is the ANSI standard.

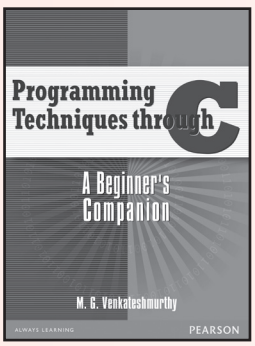
Contents

About the Authors

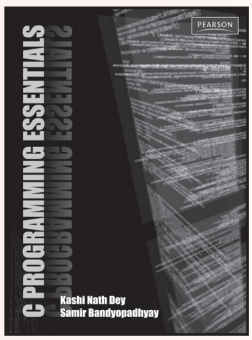
Brian W. Kernighan received his BASc from the University of Toronto in 1964 and a PhD in electrical engineering from Princeton in 1969. He was a member of the Computing Science Research center at Bell Labs until 2000, and is now a professor in the Computer Science Department at Princeton. He was a co-creator of several programming languages, including AWK, AMPL, and a number of tools for document preparation. He is the co-author of 10 books and some technical papers, and holds 4patents. He was elected to the National Academy of Engineering in 2002. His research areas include programming languages, tools and interfaces that make computers easier to use, often for non-specialist users. He is also interested in technologyeducation for non-technical audiences.

Dennis Ritchie was a computer scientist notable for his influence on ALTRAN, B, BCPL, C, Multics, and Unix.

Also Available



ISBN: 9788131705087
Pages: 248



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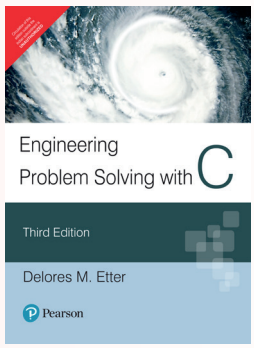

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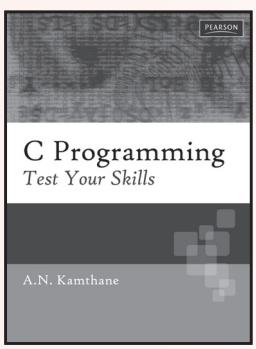
ISBN: 9789332525610
Pages: 336



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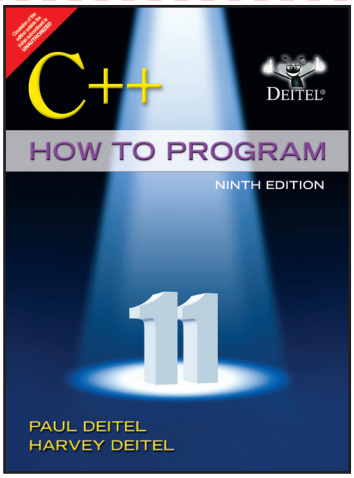


C++: How to Program, 9/e

Paul J. Deitel • Harvey Deitel

NEW

ISBN: 9789332559592 | © Year: 2016 | Pages: 1120

About the Book

The best-selling C++ How to Program is accessible to readers with little or no programming experience, yet comprehensive enough for the professional programmer. The Deitels' signature live-code approach presents the concepts in the context of full working programs followed by sample executions. The early objects approach gets readers thinking about objects immediately—allowing them to more thoroughly master the concepts. Emphasis is placed on achieving program clarity and building well-engineered software. Interesting, entertaining, and challenging exercises encourage students to make a difference and use computers and the Internet to work on problems. To keep readers up-to-date with leading-edge computing technologies, the Tenth Edition conforms to the C++11 standard and the new C++14 standard.

Features

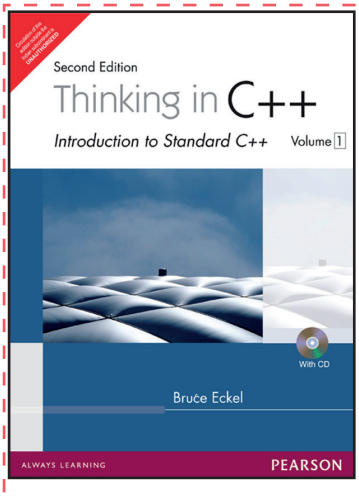
- Focus on object-oriented programming.
- Enhance learning with outstanding pedagogical features.
- Rich, early coverage of C++ fundamentals.
- Interesting, entertaining, and challenging exercises.

Contents

About the Authors

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., has over 30 years of experience in computing. He is a graduate of MIT, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer designations and is an Oracle Java Champion. He and his co-author, Dr. Harvey Deitel, are the world's best-selling programming-language textbook/ professional book/video authors.

Dr. Harvey Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has over 50 years of experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees in Electrical Engineering from MIT and a Ph.D. in Mathematics from Boston University–he studied computing in each of these programs before they spun off Computer Science programs.



Thinking in C++, Vol-1, 2/e

Bruce Eckel

ISBN: 9788131706619 | © Year: 2002 | Pages: 814

About the Book

Learn about the C++ ANSI standard from C++ expert and Standard Committee member Bruce Eckel. Assuming a basic grasp of C, Eckel guides students from understanding C to actually thinking in C++, so that they eventually write code in a total C++ mindset. His goal is to teach students the language so well that it becomes their expressive medium of choice.

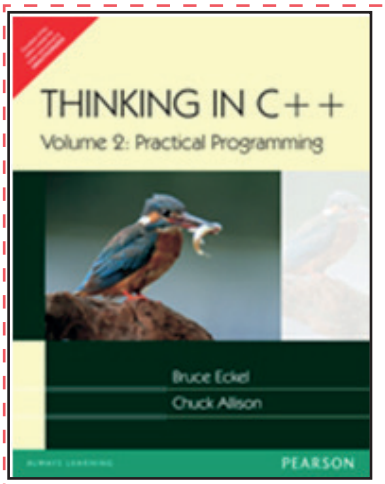
Features

- NEW - Coverage of the new ANSI C++ standard—Completely rewritten.
- NEW - A cross-platform multimedia CD-ROM introduction to ANSI C.
- NEW - Emphasis on the most important and most usable features of C++.
- NEW - Practical advice and common pitfall coverage.
- NEW - The Standard Template Library.
- One of the most widely praised and accessible presentations of object-oriented programming with C++.
- Demonstrations of how to step back from coding to consider design strategies, and attempt to "get into the head" of the designer.
- Problem features in each chapter—Explained based on the way the author sees a particular type of problem being solved using the language.
- How to write portable C++ code that is compatible with any C++ platform.

Contents

About the Author

Bruce Eckel is president of Mindview, Inc., which provides public and private training seminars, consulting, mentoring, and design reviews in Object-Oriented technology and Design Patterns. He is the author of Thinking in C++, Volume 2, and other books, has written over 150 articles, and has given lectures and seminars throughout the world for over 20 years. He has served as a voting member of the C++ Standards Committee. He holds a BS in Applied Physics and an MS in Computer Engineering.



Thinking in C++, Volume 2: Practical Programming

Bruce Eckel • Chuck Allison

ISBN: 9788131711729 | © Year: 2005 | Pages: 824

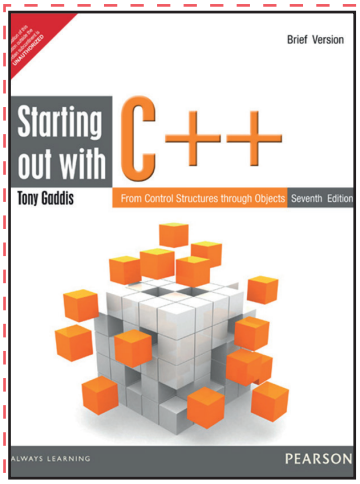
About the Book

This text fills the need for a practical C++ topics book beyond the introductory level. No other text covers the topics needed to prepare students for production C++ programming. It streamlines the process of learning the C++ language, presenting material a simple step at a time, which allows the reader to digest each concept before moving on, and provides them with a solid foundation in C++.

Features

- Emphasis on advanced testing techniques to produce optimized error free code.
- In depth covera
  ge of STL with real world reusable code examples.
- Simple short exercises that simplify complex programming routines.
- Both authors are highly respected and widely known.

Contents



Starting Out with C++: From Control Structures through Objects, Brief Edition, 7/e

Tony Gaddis

ISBN: 9789332536661 | © Year: 2014 | Pages: 1146

About the Book

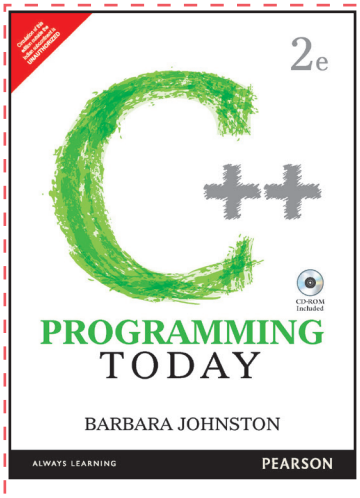
In Starting Out with C++: From Control Structures through Objects, Brief Edition, 7e, Gaddis takes a problem-solving approach, inspiring students to understand the logic behind developing quality programs while introducing the C++ programming language. This style of teaching builds programming confidence and enhances each student's development of programming skills. This edition in the Starting Out Series covers the core programming concepts that are introduced in the first semester introductory programming course. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, and an abundance of exercises appear in every chapter.

This book includes the first 15 chapters from the best-selling Starting Out with C++: From Control Structures through Objects, and covers the core programming concepts that are introduced in the first semester introductory programming course.

Features

- Control structures, functions, arrays, and pointers are covered before objects and classes.
- A clear and student-friendly writing style simplifies programming processes for beginning programmers with two to three stepped-out examples following each major concept.
- Concise real-world examples that students understand and relate to foster motivation and retention.
- A variety of exercises in each chapter encourage students to put concepts to work as they are learned. Source code is provided so students can run the programs themselves.
- Case Studies, Programming Challenges, and Group Projects simulate real-world applications and present real-world problems to be solved.

Contents



C++ Programming Today, 2/e

Barbara Johnston

ISBN: 9789332550506 | © Year: 2015 | Pages: 656

About the Book

C++ Programming Today, 2/e presents the C++ language and object-oriented theory in an easy-to-read, comprehensive text. Written in an easy-to-read, informal style, it guides the student from beginning programming through complex object-oriented techniques. The text has a large variety of program examples along with easy-to-understand figures, summary reference tables, and appendices. The text is filled with practical programming information including style guidance, debugging, multi-file program construction, and real-world, commonsense programming advice. Extensively classroom tested during development, the text incorporates the excellent student feedback and suggestions the author received. In addition, Visual C++ 2005 Express Edition is packaged with the text, providing students with an excellent development tool for learning object-oriented programming.

Features

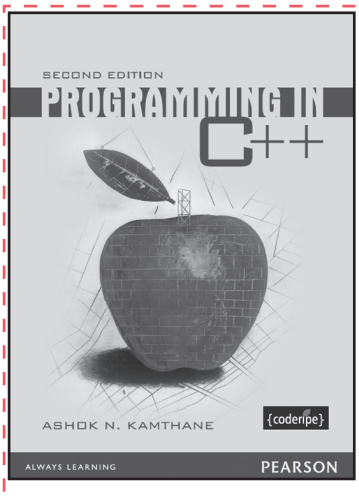
- More that 115 complete C++ programs are spread out over 8 chapters. By including both code snippets and then showing the concept in a complete program, students can better understand how programming concepts fit into "bigger" programs.
- Several C++ classes are introduced early in the text. Once students reach the chapter on writing their own classes, they have already mastered the object-oriented concepts.
- End-of-chapter exercises engage students' interest since string, vector, queue, stringstream, ifstream and ofstream classes are introduced early.
- Unique Practice! sections at the end of each chapter illustrate the common compiler and linker errors beginning students often run into, the cause of the error and how to solve it – generating overwhelmingly enthusiastic student feedback.
- Each chapter includes many programming exercises suitable for weekly assignments.

- More than 140 figures, diagrams, and screen captures illustrate topics and concepts wherever possible.
- The concise appendices handle essential topics for beginning students that other texts often exclude.
- Visual C++ 2005 Express Edition is packaged with the text, providing students with an excellent development tool for learning object-oriented programming.

Contents

About the Author

Barbara Johnston is a faculty member in the Business and Information Technology Division of Central New Mexico Community College. At the college, she is program chair for Computer Programming and Database Technology programs. She teaches C++, Java, OpenGL, and Windows programming courses. Ms Johnston also supports the software development staff of Rapid Imaging Software, Inc. by writing Java and C++ applications. Before joining the faculty of CNM, she was a software engineer and engineering manager for Rockwell International Corporation working mainly on scientific visualization and data modeling projects. Ms. Johnston earned a MS in Electrical Engineering, MA in Mathematics Education, and BS in Biology, from the University of New Mexico. Her other text books include the C++ Programming Today 1st Ed and Java Programming Today.



Programming in C++, 2/e

Ashok N. Kamthane

ISBN: 9788131791448 | © Year: 2013 | Pages: 904

About the Book

The revised and updated version of the student-friendly, practical and example-driven book, Programming in C++, continues to give its readers a solid background and a learning platform to understand the fundamentals of C++. This comprehensive book, enriched with illustrations and a number of solved programs, will help the students unleash the full potential of C++. A chapter on basics of Java language and its relation to C++, to help the students get a foundation of other object-oriented languages.

Features

- Excellent pedagogy.
  - Over 650 unsolved questions.
  - More than 250 MCQs.
  - Around 600 fully-tested programs.
- Detailed and point-wise summary at the end of every chapter.
- Exhaustive discussion on important topics like memory models, strings, templates, STL and exception handling.
- Step-by-step programming procedure followed.
- Each solved program explained thoroughly with output.

New to the second edition:

- New chapters discussing memory management and graphics.
- New chapter titled 'Basics of C++'.
- More programs added to enhance the student's understanding of the concepts.

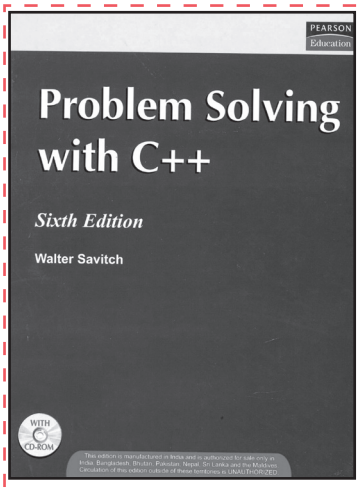
- New sections on the difference between C and C++, dynamic memory allocation and container classes.
- Three mini projects included as supplements.

Contents

1. Introduction to C++
2. Basics of C++
3. Input and output in C++
4. C++ declarations
5. Decision statements
6. Control loop structures
7. Functions in C++
8. Classes and objects
9. Constructors and destructors
10. Operator overloading and type conversion
11. Inheritance
12. Pointers and arrays
13. Memory management
14. C++ and memory models
15. Binding, polymorphism and virtual functions
16. Applications with files
17. Generic programming with templates
18. Working with strings
19. Exception handling
20. Overview of standard template library
21. Additional about ANSI and TURBO-C++
22. Marching towards Java
23. Graphics and animation

About the Author

Ashok N. Kamthane is Associate Professor, Department of Electronics and Telecommunication at SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 20 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines. Professor Kamthane is also the author of the bestselling book, Programming in C.



Problem Solving with C++, 6/e

Walter Savitch

ISBN: 9788131715857 | © Year: 2013 | Pages: 1052

About the Book

Problem Solving with C++ is the most-widely used textbook by students and instructors in the introduction to programming and C++ language course.

Features

- Students benefit from Savitch's extensive use of practical programming examples, programming projects, exercises, case studies, tips, and pitfalls.
- Control Structures and Arrays are covered before Classes.
- Advanced topic coverage includes discussions of C++ templates, inheritance, and exception handling, and a full chapter on the Standard Template Library (STL).

Contents

I. Introduction To Computers And C++ Programming

1.1 Computer Systems
1.2 Programming And Problem-Solving
1.3 Introduction To C++
1.4 Testing And Debugging

II. C++ Basics
- 2.1 Variables And Assignments
- 2.2 Input And Output
- 2.3 Data Types And Expressions
- 2.4 Simple Flow Of Control
- 2.5 Program Style

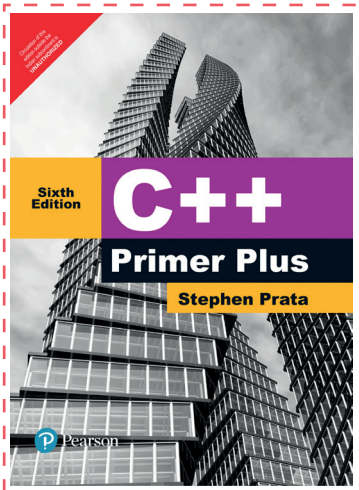
III. More Flow Of Control
- 3.1 Using Boolean Expressions
- 3.2 Multiway Branches
- 3.3 More About C++ Loop Statements
- 3.4 Designing Loops

IV. Procedural Abstraction And Functions That Return A Value
- 4.1 Top-Down Design
- 4.2 Predefined Functions
- 4.3 Programmer-Defined Functions
- 4.4 Procedural Abstraction
- 4.5 Local Variables
- 4.6 Overloading Function Names

V. Functions For All Subtasks
- 5.1 Void Functions.
- 5.2 Call-By-Reference Parameters
- 5.3 Using Procedural Abstraction
- 5.4 Testing And Debugging Functions
- 5.5 General Debugging Techniques

VI. I/O Streams As An Introduction To Objects And Classes
- 6.1 Streams And Basic File I/O
- 6.2 Tools For Stream I/O
- 6.3 Character I/O
- 6.4 Inheritance

VII. Arrays
- 7.1 Introduction To Arrays. 7.2 Arrays In Functions



C++ Primer Plus, 6/e

Stephen Prata

ISBN: 9789332546189 | © Year: 2015 | Pages: 1200

About The Book

C++ Primer Plus is an approachable yet technically rigorous guide to C++ for programmers new to the language. This new edition updates it with the most important features added to the C++11 standard, while keeping the style and approach which have made the previous editions so popular. It contains extensive new code samples and exercises, for both classroom use and self-study.

Features

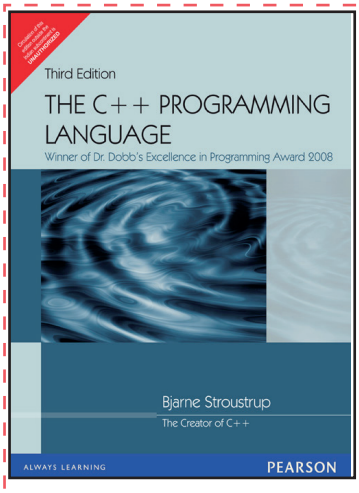
- New coverage of the C++11 standard
- Teaches fundamentals of programming including principles of structured code and top-down design
- Written in a friendly and engaging style, yet completely technically accurate
- Instructor resources available through the IRC: solutions to end of chapter programming exercises and source code for the book's examples

Contents

1. Getting Started with C++
2. Data Types
3. Control Statements and Operators
4. Functions
5. Memory models and Namespace
6. Objects and Classes
7. More on classes
8. Friends, Exceptions and, More
9. The string class and the Standard Template Library
10. Input, Output, and Files
11. Reusing Code in C++ (online)
12. Visiting with the New C++ Standard (online)

About the Author

Stephen Prata taught astronomy, physics, and computer science at the College of Marin in Kentfield, California. He received his B.S. from the California Institute of Technology and his Ph.D. from the University of California, Berkeley. He has authored or coauthored more than a dozen books on programming topics including New C Primer Plus, which received the Computer Press Association's 1990 Best How-to Computer Book Award, and C++ Primer Plus, nominated for the Computer Press Association's Best How-to Computer Book Award in 1991.



The C++ Programming Language, 3/e

Bjarne Stroustrup

ISBN: 9788131705216 | © Year: 2002 | Pages: 1040

About the Book

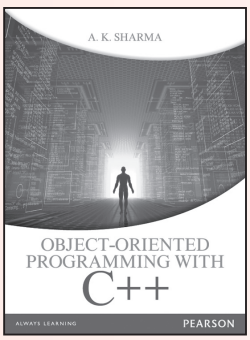
One book has always set the standard for C++ programmers: The C++ Programming Language, by Bjarne Stroustrup, the Bell Laboratories developer who created C++. Now, Stroustrup has updated this classic with clarifications based on reader feedback and new information in two brand-new appendices on ISO/ANSI C++: internationalization and exception safety. This makes The C++ Programming Language: Special Edition the only book with authoritative coverage of every important element of C++.

Features

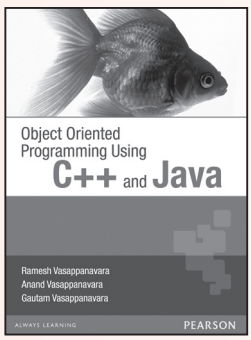
- Includes significant new updates and two brand-new appendices on internationalization and Standard Library technicalities.
- The most widely read and trusted guide to the C++ language, standard library, and design techniques: More than 650,000 copies sold already!
- The only book with authoritative, accessible coverage of every major element of ISO/ANSI Standard C++.

Contents

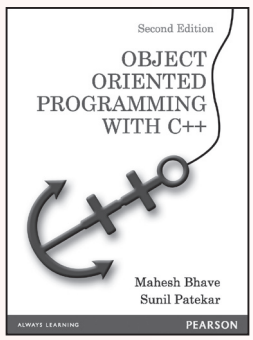
Also Available



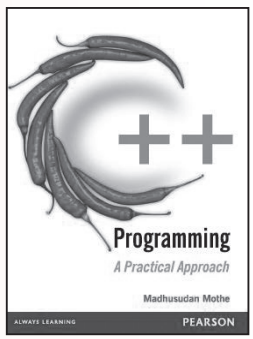
ISBN: 9789332515833
Pages: 352



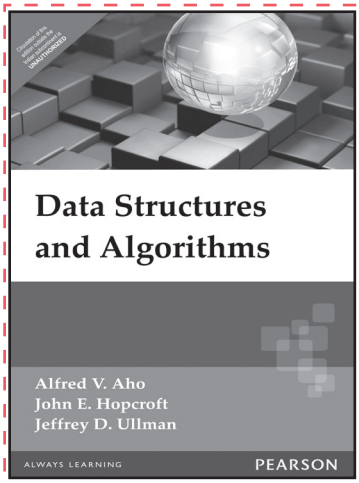
ISBN: 9788131754559
Pages: 672



ISBN: 9788131770726
Pages: 688



ISBN: 9788131760529
Pages: 472



Data Structures and Algorithms

Alfred V. Aho • John E. Hopcroft • Jeffrey D. Ullman

ISBN: 9788177588262 | © Year: 2002 | Pages: 436

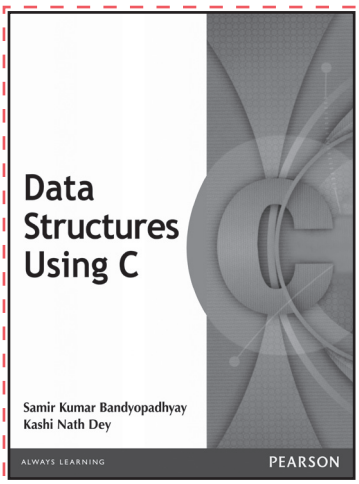
About the Book

An ideal book for first course on data structures and algorithms, its text ensures a style and content relevant to present-day programming. The only pre-requisite it assumes is familiarity with a high-level programming language like Pascal. The book spans cohesively across wide-ranging topics and serves as a comprehensive text for the undergraduate as well as the graduate student.

Features

- Use of abstract data types in the description & implimention of algorithms.
- Projecting step counting and time complexity as an integral part of problem-solving.
- Exercises of varying degrees at the end of each chapter.

Contents



Data Structures Using C

Samir Kumar Bandyopadhyay • Kashi Nath Dey

ISBN: 9788131722381 | © Year: 2004 | Pages: 324

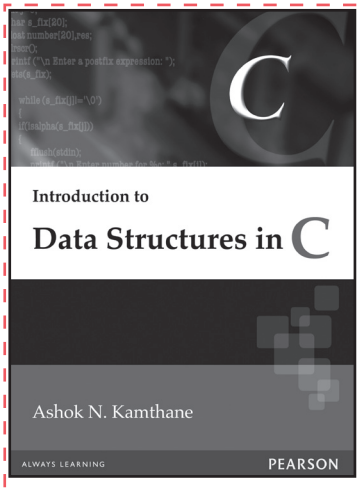
About the Book

Data Structures Using C brings together a first course on data structures and the complete programming techniques, enabling students and professionals implement abstract structures and structure their ideas to suit different needs. This book elaborates the standard data structures using C as the basic programming tool. It is designed for a one semester course on Data Structures.

Features

- Basic data representation techniques.
- Concepts of implementing a data structure.
- Arrays and their applications.
- How and when to use pointers.
- Major application areas of linked lists.
- Internal and external sorting algorithms.
- Searching methodologies.
- Trees—binary trees, binary search trees, AVL trees, B-trees.
- Fundamental graph algorithms.

Contents



Introduction to Data Structures in C

Ashok N. Kamthane

ISBN: 9788131713921 | © Year: 2004 | Pages: 512

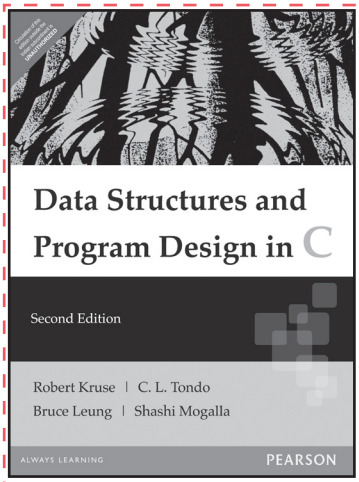
About the Book

Introduction to Data Structures in C is an introductory textbook on the subject. The contents of the book are designed as per the requirement of the syllabus and the students. This book will be useful for students of B.E. (Computer/Electronics), MCA, BCA, M.Sc., B.Sc., and also to students pursuing A-level Course of DOEACC.

Features

- Each theory is supported with programs; concepts are illustrated by excellent examples.
- Algorithms are explored in detail and analysed showing step-by-step solutions to problems.
- Objective type questions have been provided.
- The language is lucid and easy.
- About 200 programs have been solved.
- Diagrams are used extensively throughout the text.
- Numerous theory questions and exercises are included that vary widely in type and difficulty.

Contents



Data Structures and Program Design in C, 2/e

Robert L. Kruse • Bruce P. Leung • C. L. Tondo • Shashi Mogalla

ISBN: 9788177584233 | © Year: 2006 | Pages: 624

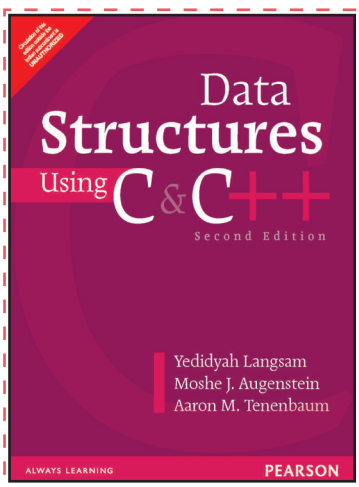
About the Book

Market: Appropriate for Computer Science II and Data Structures in departments of Computer Science. This introduction to data structures using the C programming language emphasizes problem specification and program design, analysis, testing, verification, and correctness. **Data Structures and Program Design in C** combines careful development of fundamental ideas with their stepwise refinement into complete, executable programs.

Features

- Stresses recursion through a range of applications and development of criteria for use.
- Includes case studies that integrate various topics into programs of realistic size.
- Discusses major principles of software engineering and applies them to large programming projects.
- Emphasizes the process of data abstraction and abstract data types (ADT), separating ADTs from implementation decisions.
- All programs revised to emphasize data abstraction, to develop and employ reusable code, and to strengthen uniformity and elegance of style.
- Recursion treated much earlier and emphasized throughout.
- New coverage of several modern topics: splay trees, red-black trees, amortized algorithm analysis.

Contents



Data Structures Using C & C++, 2/e

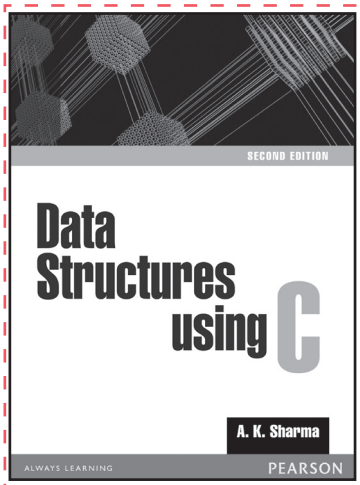
Yedidyah Langsam • Moshe J. Augenstein • Aaron M. Tenenbaum

ISBN: 9789332549319 | © Year: 2015 | Pages: 672

About the Book

This very successful data structures text uses the standard ANSI C programming language to present the fundamentals of data structures and algorithm analysis. In addition, the authors introduce the features of C++ and show how they can be used to implement data structures. Real world problems are used to demonstrate how abstract concepts can be solved through the careful application of C and C++.

Contents



Data Structures using C, 2/e

A. K. Sharma

ISBN: 9788131792544 | © Year: 2013 | Pages: 520

About the Book

A Data Structure is the logical organization of a set of data items that collectively describe an object. Using the C programming language, this book describes how to effectively choose and design a data structure for a given situation or problem. The book has a balance between the fundamentals and advanced features, supported by solved examples. This book completely covers the curriculum requirements of computer engineering courses across universities in India.

Features

- Easy to understand text coupled with simple to understand examples.
- Every data-structure is supported with a pictorial representation and its possible implementations.
- Over 100 solved problems.
- All programs tested using Turbo 'C'.

New to the Second Edition:

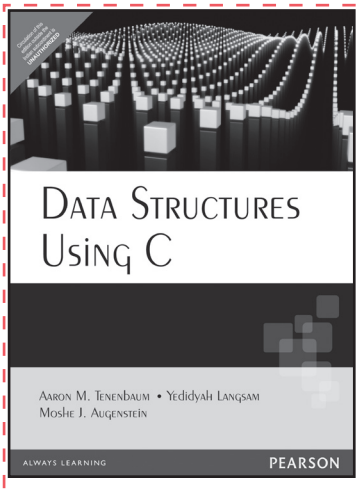
Complete sections on:

1. Sparse matrices
2. Recursion
3. Hashing
4. Weighted binary trees
   a. Huffman algorithm
5. Spanning trees, minimum cost spanning trees
   a. Kruskal algorithm
   b. Prims algorithm
6. Shortest path problems
   a. Warshall's algorithm
   b. Floyd's algorithm
   c. Dijkstra's Algorithm
7. Indexed File Organization

Contents

About the Author

A.K. Sharma is currently Chairman, Department of Computer Engineering, and Dean of Faculty, Engineering and Technology at YMCA University of Science and Technology, Faridabad. He is also a member of the Board of Studies committee of Maharshi Dayanand University, Rohtak. He has guided 10 Ph.D. theses and has published about 215 research papers in national and international journals of repute. He heads a group of researchers actively working on the design of different types of 'Crawlers'.



Data Structures Using C

Aaron M. Tenenbaum • Yedidyah Langsam • Moshe J. Augenstein

ISBN: 9788131702291 | © Year: 2003 | Pages: 672

About the Book

Helping readers build efficient C data structures, this handbook explains how to apply data structures to enhance program execution. With a strong emphasis on structured design and programming techniques, it features precise instructions on all the steps involved in data structure development—from theoretical conception to concrete realization.

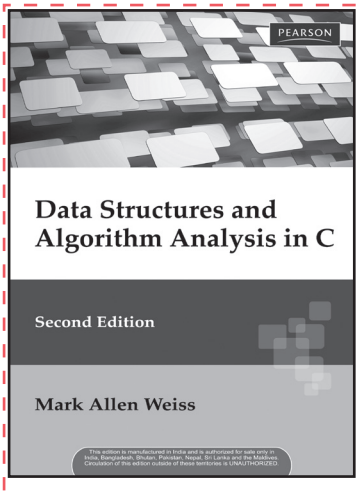
Coverage Includes:

- Several alternative implementations of data structures—along with advice on choosing the one most suited to your needs at hand.
- Numerous debugged programming examples.
- Complete development of all programs.
- Graphic representation of material.
- Sorting and searching algorithms.
- Up-to-date research findings.

Features

- Follows data structure development from its theoretical conception to its concrete realization.
- Offers several alternative implementations of data structures and discusses tradeoffs involved in choosing a particular approach.
- Contains numerous debugged programing examples.
- Emphasizes structured design and programming techniques.

Contents



Data Structures and Algorithm Analysis in C, 2/e

Mark Allen Weiss

ISBN: 9788177583588 | © Year: 2002 | Pages: 528

About the Book

In the second edition of this best-selling book, the author continues to refine and enhance his innovative approach to algorithms and data structures. Using a C implementation, he highlights conceptual topics, focusing on ADTs and the analysis of algorithms for efficiency as well as performance and running time.

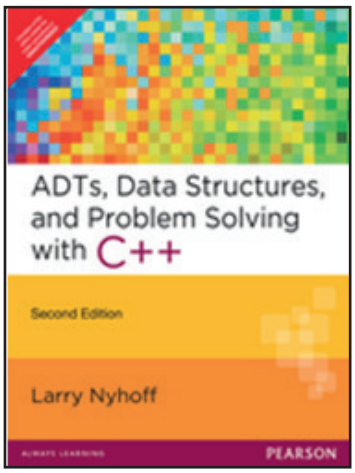
Features

- Includes a chapter on algorithm and design techniques that cover greedy algorithms, divide and conquer algorithms, dynamic programming, randomized algorithms and backtracking.
- Presents current topics and newer data structures such as Fibonacci heaps, skew heaps, binomial queues, skip lists and splay trees.
- Incorporates new results on the average case analysis of heapsort.
- Offers source code from example programme via anonymous FTP.

Contents

About the Author

Mark Allen Weiss belongs to the Department of Computer Science at the Florida International University.



ADTs, Data Structures, and Problem Solving with C++, 2/e

Larry Nyhoff

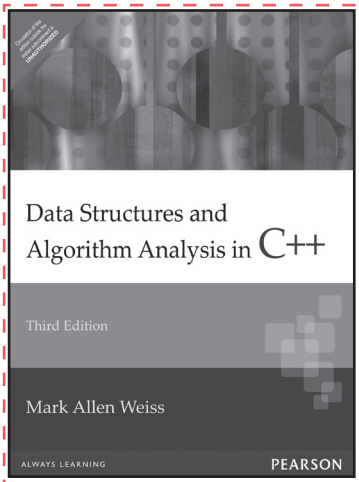
ISBN: 9788131764701 | © Year: 2011 | Pages: 1264

About the Book

This text continues to offer a thorough, well-organized, and up-to-date presentation of essential principles and practices in data structures using C++. Reflecting the newest trends in computer science, new and revised material throughout the Second Edition places increased emphasis on abstract data types (ADTs) and object-oriented design.

Features

- New chapters on searching and C++'s I/O and string classes.
- Improvements and additions to diagrams.
- Consistent naming conventions.
- Complete source code for ADTs.
- Expanded treatment of selected topics on the text's website.
- Introduces UML and uses UML-style diagrams for ADT specifications.



Data Structures and Algorithm Analysis in C++, 3/e

Mark Allen Weiss

ISBN: 9788131714744 | © Year: 2007 | Pages: 606

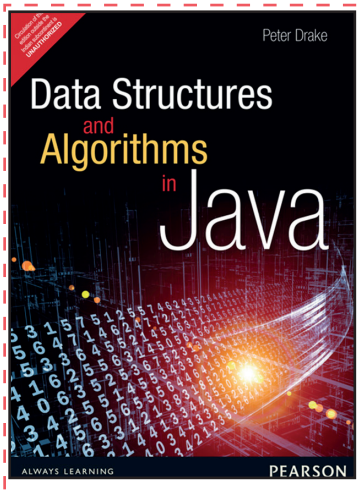
About the Book

The C++ language is brought up-to-date and simplified, and the Standard Template Library is now fully incorporated throughout the text. **Data Structures and Algorithm Analysis in C++** is logically organized to cover advanced data structures topics from binary heaps to sorting to NP-completeness. Figures and examples illustrating successive stages of algorithms contribute to Weiss' careful, rigorous and in-depth analysis of each type of algorithm.

Features

- Discussion of algorithm and design techniques covers greedy algorithms, divide and conquer algorithms, dynamic programming, randomized algorithms, and backtracking.
- Covers topics and data structures such as Fibonacci heaps, skew heaps, binomial queue, skip lists and splay trees.

Contents



Data Structures and Algorithms in Java

Peter Drake

ISBN: 9789332535176 | © Year: 2014 | Pages: 512

About the Book

An abundance of unique, interesting examples, use of the Unified Modeling Language throughout, and the newest Java 1.5 features characterize this text. Drake provides a concise and engaging introduction to Java and object-oriented programming, assuming familiarity with the basic control structures of Java or C and only a pre-calculus level of mathematics.

Features

- Five-part structure using the "inverted pyramid" style - Covers object-oriented programming, linear structures, algorithms, trees and collections, and advanced topics, addressing critical concepts up front.
- Extensive use of games as examples - Captures students' interest and imagination with realistic challenges involving dice, cards, and boards.
- Numerous diagrams - Illustrate key concepts, provide an instant review, and serve as a landmark when reviewing the text.
- Practical approach to real-world programming - Allows readers to compile and run a program as quickly as possible, rather than focusing on abstract software engineering techniques.
- Frequent, early examples in each chapter - Let students to absorb abstract concepts in the context of concrete problems.
- Process of crafting programs - Works through the development of each project, often providing multiple versions of the code and considering alternate designs, to give students experience in the processof crafting programs rather than just the results.
- Use of Unified Modeling Language throughout - Introduces student to the industry standard for diagrams of classes and class relationships.
- Clear, concise presentation - Addresses one data structure at a time.
- Gradual development of classes analogous to the Java Collections Framework.
- Complete, working code in text and online - Provides access to code even when students are not in front of a computer. Includes complete code for B-trees.
- Strong pedagogy - Features at least one extended example in almost every chapter, in addition to exercises at the end of every section and problems and projects at the end of every chapter.

Contents

IV. Trees and Sets

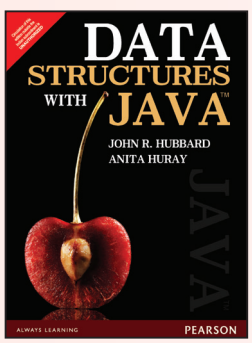
10. Trees. Binary Trees. Tree Traversal. General Trees
11. Sets. The Set Interface. Ordered Lists. Binary Search Trees. Hash Tables. The Java Collections Framework Again

V. Advanced Topics

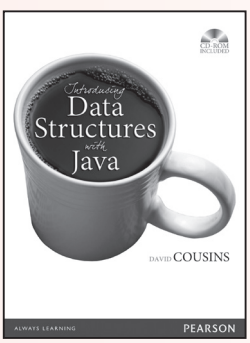
12. Advanced Linear Structures. Bit Vectors. Sparse Arrays. Contiguous Representation of Multidimensional Arrays Advanced Searching and Sorting
13. Strings. Strings and StringBuilders. String Matching
14. Advanced Trees. Heaps. Disjoint Set Clusters. Digital Search Trees. Red-Black Trees
15. Graphs. Terminology. Representation. Graph Traversal. Topological Sorting. Shortest Paths. Minimum Spanning Trees
16. Memory Management. Explicit Memory Management. Automatic Memory Management
17. Out to the Disk. Interacting With Files. Compression. External Sorting. B-Trees

Review of Java
Unified Modeling Language
Summation Formulae
Further Reading

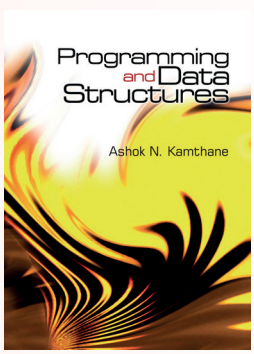
Also Available



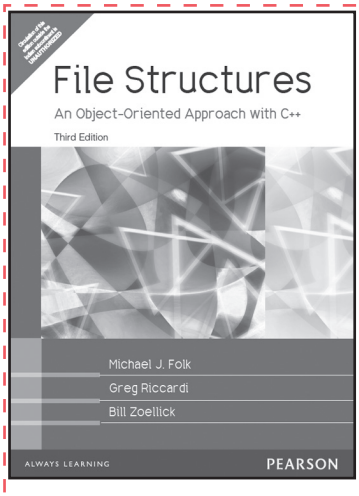
ISBN: 9789332549395
Pages: 700



ISBN: 9788131758649
Pages: 464



ISBN: 9788131724224
Pages: 604



File Structures: An Object-Oriented Approach with C++, 3/e

Michael J. Folk • Greg Riccardi • Bill Zoellick

ISBN: 9788177583731 | © Year: 2002 | Pages: 744

About the Book

File Structures: An Object-Oriented Approach with C++ presents the study of the structures through an object-oriented approach allowing students and professionals to acquire the fundamental tools need to design intelligent, cost-effective, and appropriate solutions to file structure problems. This book uses the hands-on work of constructing and running programs as the centre of the learning process in teaching design.

Features

- Presents file structures techniques, including direct access I/O, buffer packing and unpacking, indexing, consequential processing, B-trees, and external hashing.
- Includes extensive coverage of secondary storage devices, including disk, tape, and CD-ROM.
- Covers practice of object-oriented design and programming with complete implementations in C++.
- Develops a collection of C++ classes that provide a framework for solving file structure problems.
- Includes class definitions, sample applications, and programming problems and exercises.

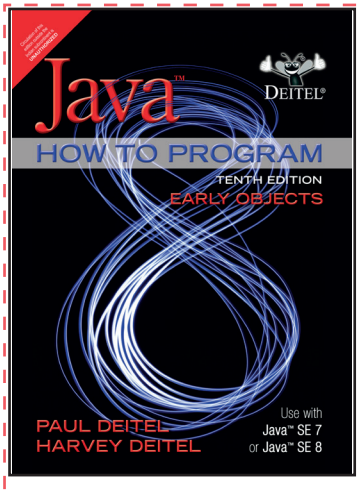
Contents

About the Authors

Michael J. Folk manages the Scientific Data Technologies Group at the National Centre for Supercomputing Applications at the University of Illinols in Urbana.

Greg Riccard is a professor of computer science at Florida State University and an associate of the Supercomputer Computations Research.

Bill Zoellick is director of the Document Software Strategies service at CAP Ventures, a leading strategic consulting and market research firm for document systems.



Java How To Program: Early Objects, 10/e

Paul Deitel • Harvey Deitel

ISBN: 9789332563292 | © Year: 2016 | Pages: 1240

NEW

About the Book

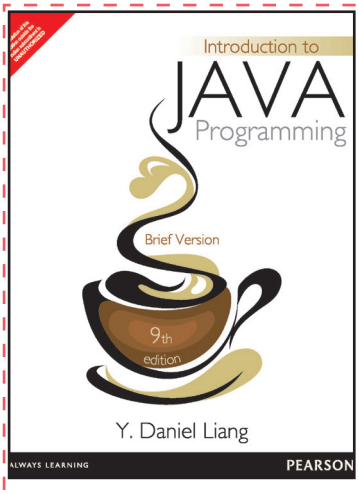
Java How to Program (Early Objects), Tenth Edition, teaches programming by presenting the concepts in the context of full working programs and takes an early-objects approach. It offers unparalleled breadth and depth of object-oriented programming concepts and intermediate-level topics for further study.

Contents

About the Author

Paul Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of the MIT Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer professional certifications, and has been designated by Sun Microsystems as a Java Champion—"a prominent member of the Java community whose input is solicited by the company in order to improve the Java platform."

Dr. Harvey Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 46 years of academic and industry experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College.



Introduction to Java Programming: Brief Version, 9/e

Y. Daniel Liang

ISBN: 9789332535213 | © Year: 2014 | Pages: 800

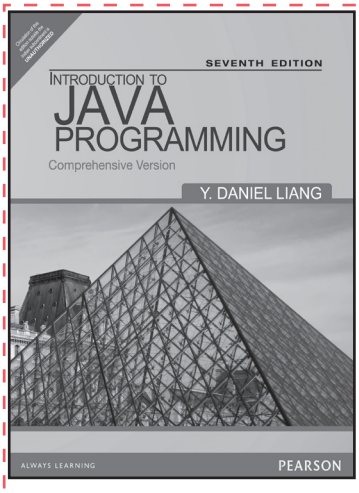
About the Book

Daniel Liang teaches concepts of problem-solving and object-oriented programming using a fundamentals-first approach. Beginning programmers learn critical problem-solving techniques then move on to grasp the key concepts of object-oriented, GUI programming. The Brief version is comprised of Chapters 1-20 of the Comprehensive.

Features

- Unified Modeling Language graphical notations throughout - Describes classes and their relationships; teaches students design and development of Java programs using the industry standard modeling technique.
- Practical examples on gaming (simulating lottery, interactive quiz, Sudoku), business/financial (computing loan payments, taxes, and printing payroll statements), science (body mass index, wind chill temperature) - Replaces pure mathematical examples such as computing deviations and matrix multiplications.
- Superior pedagogical design - Reinforces key concepts with objectives lists, introduction and chapter overviews, easy-to-follow examples, chapter summaries, review questions, programming exercises, and interactive self-tests.
- Case studies — Offer additional examples for learning the fundamentals of programming, such as writing loops.
- Carefully chosen, easy-to-follow, representative examples — Include: description of the example, source code, sample run, and example review.
- Notes and tips throughout - Offer valuable advice and insight on important aspects of program development.
- Sample exams - Include multiple-choice questions, correct programming errors, trace programs, and write programs.

Contents



Introduction to Java Programming Comprehensive Version, 7/e

Y. Daniel Liang

ISBN: 9788131729588 | © Year: 2009 | Pages: 1328

About the Book

Regardless of major, students will be able to grasp concepts of problem-solving and programming – thanks to Liang's ground breaking fundamentals-first approach, which enables students to understand problem solving and core constructs before object-oriented programming. Liang's approach has been extended to application-rich programming examples, which go beyond the traditional math-based problems found in most texts. Although students begin using objects early, they are introduced to topics like control statements, methods, and arrays before learning to create classes Later chapters introduce advanced topics including graphical user interface, exception handling, I/O, and data structures. Small, simple examples demonstrate concepts and techniques while longer examples are presented in case studies with overall discussions and thorough line-by-line explanations.

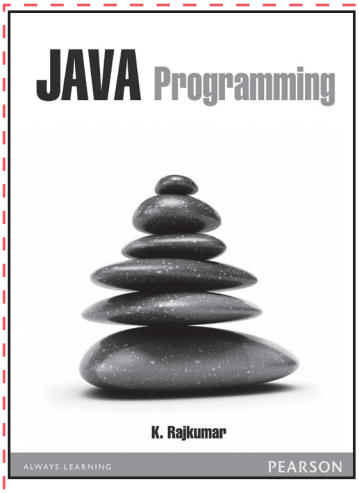
Features

- Innovative fundamentals-first approach.
- Exceptionally broad range of carefully chosen examples.
- Complete coverage on Java collections framework, threads, JavaBeans, advanced GUI components, JDBC, Servlets, JSP, networking, and RMI.
- Practical examples on gaming (simulating lottery, interactive quiz, Sudoku), business/financial (computing loan payments, taxes, and printing payroll statements), science (body mass index, wind chill temperature).
- Carefully chosen, easy-to-follow, representative examples.

Contents

About the Author

Dr.Y. Daniel Liang earned his Ph.D. in Computer Science from the University of Okalahoma in 1991, and an MS and BS in Computer Science from Fudan University in Shanghai, China, in 1986 and 1983. Prior to joining Armstrong, he was an associate professor in computer science at Purdue University in Fort Wayne, where he twice received the Excellence in Research award.



JAVA Programming

K. Rajkumar

ISBN: 9788131799093 | © Year: 2013 | Pages: 704

About the Book

This textbook is a fundamental resource for undergraduate computer science students for learning all the essential concepts and programming techniques of JAVA. Spread across seventeen chapters the contents are designed according to the UGC curriculum starting with basics of JAVA, object oriented programming, threads and IO streams and finally GUI programming. The text is enhanced with end of chapter exercises, key terms and multiple choice questions which would make this book an ideal student's course companion.

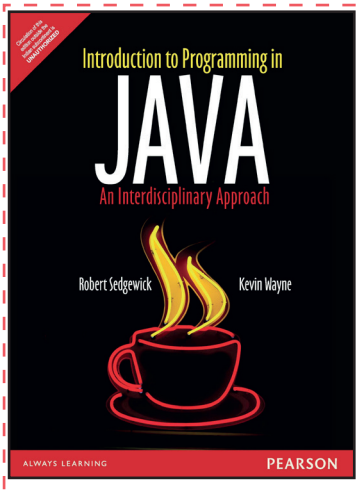
Features

- In-depth coverage of basics of JAVA and JAV containers for holding objects.
- Detailed explanation of conditional and looping statements and arrays.
- Over 200 solved examples.
- Over 200 multiple choice questions.
- 300 end of chapter exercises.

Contents

About the Author

K. Rajkumar is the Head of the Department for Department of Computer Science, Bishop Heber College, Tiruchchirappalli, Tamil Nadu.



Introduction to Programming in Java: An Interdisciplinary Approach

Robert Sedgewick • Kevin Wayne

ISBN: 9789332535121 | © Year: 2014 | Pages: 448

About the Book

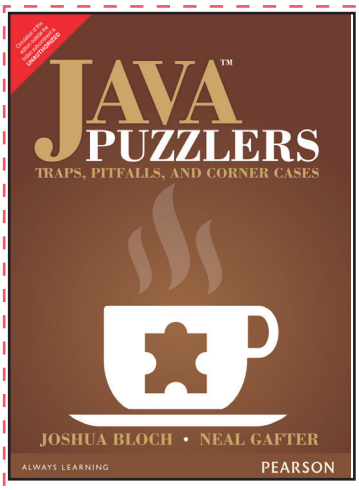
By emphasizing the application of computer programming not only in success stories in the software industry but also in familiar scenarios in physical and biological science, engineering, and applied mathematics, Introduction to Programming in Java takes an interdisciplinary approach to teaching programming with the Java&trade programming language. Interesting applications in these fields foster a foundation of computer science concepts and programming skills that students can use in later courses while demonstrating that computation is an integral part of the modern world.

Ten years in development, this book thoroughly covers the field and is ideal for traditional introductory programming courses. It can also be used as a supplement or a main text for courses that integrate programming with mathematics, science, or engineering.

Features

- Students learn basic computer science concepts in the context of familiar applications from their college preparatory mathematics and science background, creating an appreciation that computer programming is often at the heart of other scientific genres and research.
- The book takes an "objects in the middle" approach where students learn basic control structures and functions, then how to use, create, and design classes.
- The book features a full programming model that includes standard libraries for input, graphics, sound, and image processing that students can apply and use from the beginning.

Contents



Java Puzzlers: Traps, Pitfalls, and Corner Cases, 1/e

Joshua Bloch

ISBN: 9789332547933 | © Year: 2016 | Pages: 256

About the Book

Based on Bloch and Gafter's standing room only Java Puzzlers talk at JavaOne, the heart of the book comprises about 100 Java programming language puzzlers: brainteasers that challenge the intellect while alerting programmers to the traps, pitfalls, and corner cases that lurk in the nether regions of the Java platform.

All of the puzzles from the authors' popular JavaOne presentations are included, as are many puzzles never before seen in public. There are two major types of puzzles in the book. Most of the puzzles take the form of short programs that appear to do

something but actually do something else. Readers will be encouraged to predict the behavior of the program before running it. After running the program, readers will be encouraged to figure out why it behaved as it did before consulting the solution. In a second type of puzzle, the reader will be asked to write a short program that performs some specific task. Most of the solutions will contain a &ldquomoral," a rule the reader can follow to avoid the problematic behavior demonstrated in the puzzle. The puzzles are grouped into chapters based on the primary platform features they exercise and to maximize readability, fun, and pedagogical effectiveness.

Features

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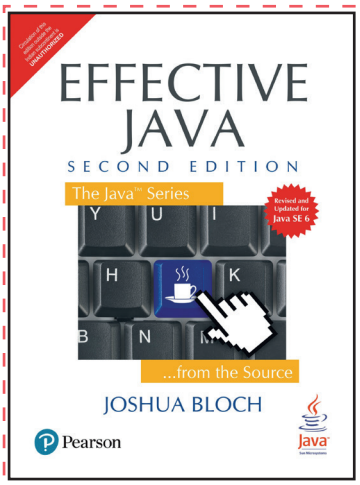
Contents

About the Author

Joshua Bloch is a principal engineer at Google and a Jolt Award-winner.

Neal Gafter is a software engineer and Java evangelist at Google.



Effective Java, 2/e

Joshua Bloch

NEW

ISBN: 9789332576537 | © Year: 2017 | Pages: 264

About the Book

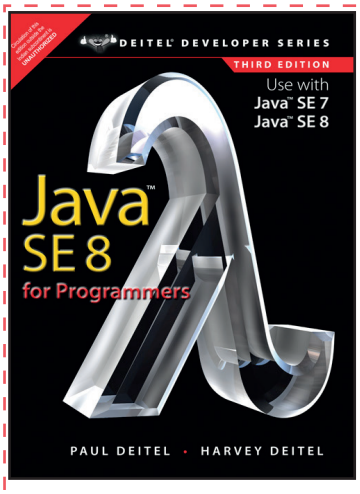
This highly anticipated new edition of the classic, Jolt Award-winning work has been thoroughly updated to cover Java SE 5 and Java SE 6 features introduced since the first edition. Bloch explores new design patterns and language idioms, showing you how to make the most of features ranging from generics to enums, annotations to autoboxing. Each chapter in the book consists of several &ldquoitems" presented in the form of a short, standalone essay that provides specific advice, insight into Java platform subtleties, and outstanding code examples. The comprehensive descriptions and explanations for each item illuminate what to do, what not to do, and why.

Features

- New coverage of generics, enums, annotations, autoboxing, the for-each loop, varargs, concurrency utilities, and much more
- Updated techniques and best practices on classic topics, including objects, classes, libraries, methods, and serialization

- How to avoid the traps and pitfalls of commonly misunderstood subtleties of the language
- Focus on the language and its most fundamental libraries: java.lang, java.util, and, to a lesser extent, java.util.concurrent and java.io"

Contents



Java SE8 for Programmers, 3/e

NEW

Harvey M. Deitel • Paul J. Deitel

ISBN: 9789332539068 | © Year: 2014 | Pages: 1080

About the Book

Written for programmers with a background in high-level language programming, this book applies the Deitel signature live-code approach to teaching programming and explores the Java&amptrade language and Java&amptrade APIs in depth. The book presents¿ concepts in the context of fully tested programs, complete with syntax shading, code highlighting, line-by-line code walkthroughs and program outputs. The book features hundreds of complete Java&amptrade programs with thousands of lines of proven Java&amptrade code, and hundreds of tips that will help you build robust applications.

Start with an introduction to Java&amptrade using an early classes and objects approach, then rapidly move on to more advanced topics, including GUI, graphics, exception handling, lambdas, streams, functional interfaces, object serialization, concurrency, generics, generic collections, JDBC&amptrade and more. You'll enjoy the Deitels' classic treatment of object-oriented programming and the object-oriented design ATM case study, including a complete Java&amptrade implementation. When you're finished, you'll have everything you need to build industrial-strength object-oriented Java&amptrade SE 7 and SE 8 (Java 8) applications.

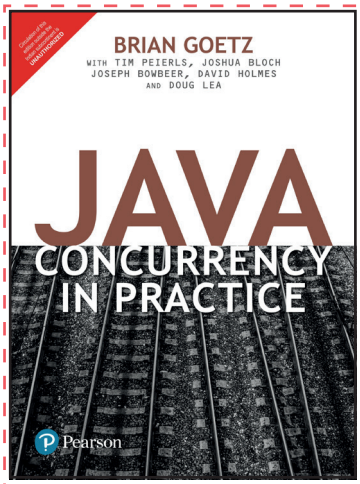
Features

- A comprehensive tutorial to the Java programming language, for programmers who are new to Java
- Uses the Deitels' signature "live code" style, where every programming concept is explored in the context of a complete working program, not a code fragment
- Covers everything from the basics to advanced topics such as multithreading, as well as all the new features in Java SE 8

Contents

About the Author

Paul Deitel and **Harvey Deitel** are from Deitel & Associates, Inc., the internationally recognized programming languages authoring and corporate-training organization. Millions of people worldwide have used Deitel books, e-books, LiveLessons video training and online resource centers to master Java™, C++, Android™ app development, iOS® app development, C#, .NET, Visual Basic®, Visual C++®, C, Internet and web programming, JavaScript®, XML, Perl®, Python®, PHP and more.



Java Concurrency in Practice, 1/e

David Holmes • Doug Lea • Brian Goetz • Tim Peierls
Joshua Bloch • Joseph Bowbeer

NEW

ISBN: 9789332576520 | © Year: 2017 | Pages: 368

About the Book

This book is a combination of concepts, guidelines, and examples intended to assist developers in the difficult process of understanding concurrency and its new tools in J2SE 5.0. Filled with contributions from Java gurus such as Josh Bloch, David Holmes and Doug Lea, this book provides any Java programmers with the basic building blocks they need to gain a basic understanding of concurrency and its benefits.

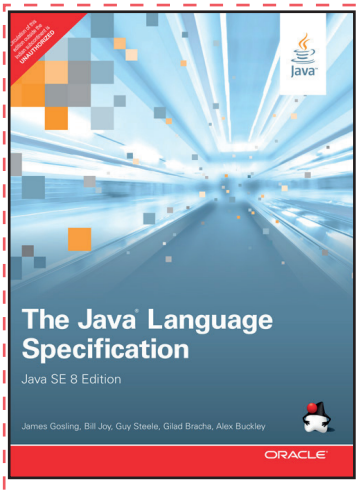
Features

- Powerhouse author team with contributions from Doug Lea, Josh Bloch and David Holmes
- A practical, hands-on, example-driven guide for every working Java programmer
- Based on J2SE 5.0 which includes many new concurrency features that make concurrency development much more accesible (and necessary)"

Contents

About the Authors

Brian Goetz
Tim Peierls
Joshua Bloch
Joseph Bowbeer
David Holmes



The Java Language Specification, Java SE 8 Edition, 1/e

James Gosling

ISBN: 9789332539075 | © Year: 2014 | Pages: 798

About the Book

This book provides complete, accurate, and detailed coverage of the Java programming language. It fully describes the new features added in Java SE 8, including lambda expressions, method references, default methods, type annotations, and repeating annotations. The book also includes many explanatory notes and carefully distinguishes the formal rules of the language from the practical behavior of compilers.

Features

- Fully reflects the single largest evolution of the Java language in its history
- Provides meticulous coverage of Java SE 8's syntax, semantics, and constructs
- Thoroughly covers major, long-awaited improvements in Java SE 8, including lambda expressions, method references, default methods, and more
- Fully addresses crucial enhancements to Java's popular annotations features
- Packed with valuable insights distinguishing Java's formal rules from real-world compiler behavior
- An indispensable resource for every serious programmer using the #1 language for enterprise development: Java

Contents

About the Author

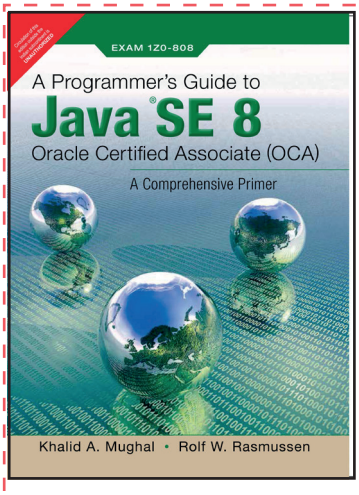
James Gosling is the creator of the Java programming language and a former Fellow at Sun Microsystems. He developed the original Java compiler and Java Virtual Machine, and was a principal in the Andrew project at Carnegie Mellon University, where he earned a Ph.D. in Computer Science. He joined Liquid Robotics as Chief Software Architect in 2011.

Bill Joy is a co-founder of Sun Microsystems and was the principal architect of the Berkeley version of UNIX®, for which he received a lifetime achievement award from the USENIX Association in 1993. Joy has had a central role in shaping the Java programming language. He joined KPCB as a Greentech Partner in 2005.

Guy L. Steele Jr. is a Software Architect at Oracle Labs, where he conducts research in language design and implementation strategies, parallel algorithms, and computer arithmetic. Steele is a co-creator of the Scheme programming language, an ACM Fellow, an IEEE Fellow, and a member of the National Academy of Engineering.

Gilad Bracha is the creator of the Newspeak programming language and a former Distinguished Engineer at Sun Microsystems. Prior to Sun, he worked on Strongtalk, the Animorphic Smalltalk System. He holds a Ph.D. in Computer Science from the University of Utah.

Alex Buckley is the Specification Lead for the Java programming language and the Java Virtual Machine at Oracle. He holds a Ph.D. in Computing from Imperial College London.



A Programmer's Guide to Java SE 8 Oracle Certified Associate (OCA), 1/e

Khalid A. Mughal • Rolf W. Rasmussen

NEW

ISBN: 9789332579378 | © Year: 2017 | Pages: 680

About the Book

Unique among Java books, A Programmer's Guide to OCA Java SE 8 Certification, A Comprehensive Primer, Fourth Edition combines an integrated, expert guide to Java SE 8 with comprehensive review for Oracle's newest OCA certification exam. Khalid A. Mughal and Rolf W. Rasmussen have thoroughly revised this tutorial/reference/prep guide to reflect major changes in the exam, including its increased focus on analyzing code scenarios, not just individual language constructs. Mughal and Rasmussen thoroughly address each exam objective, reflecting the latest Java SE 8 features, API classes, and best practices for effective development.

Features

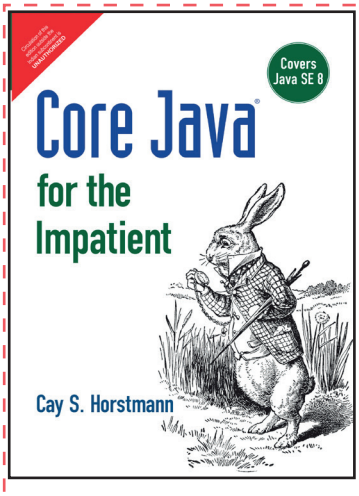
- The definitive, complete tutorial and prep guide for the new Oracle Certified Associate (OCA) exam for Java SE 8: fully revised and updated.
- The only book to combine an integrated, up-to-date guide to Java with comprehensive OCA review.
- Supports the exam's increased focus on analyzing code scenarios, not just individual language constructs.
- Covers declarations, initialization, scoping, flow control, key APIs, concurrency, objects, collections, generics, access control, and more.
- Provides valuable code examples, hands-on exercises, review questions, and several full practice exams.

Contents

About the Authors

Khalid A. Mughal is an associate professor at the Department of Informatics, University of Bergen, Norway. During his extensive career, he has designed and implemented many courses on Java, object-oriented system development, web application development, software security, and compiler techniques. He has also given seminars for the IT industry. He is the principal author of two programming books on Java.

Rolf W. Rasmussen is a system development manager at Vizrt, a company that develops real-time graphics systems for broadcast media. Previously he worked on clean-room implementations of the Java class libraries. He is a coauthor of two programming books on Java.



Core Java for the Impatient, 1/e

Cay S. Horstmann

NEW

ISBN: 9789332552425 | © Year: 2015 | Pages: 528

About the Book

This book covers all aspects of Java that a modern developer needs to know, including the powerful lambda expressions that have been introduced in Java 8. It also tells how to find out more about old-fashioned concepts that might still be seen in legacy code, but doesn't dwell on them. This book also provides fresh coverage of concurrent programming topics, showing how to use the powerful streams library features in Java 8 instead of tedious and error-prone manual locking.

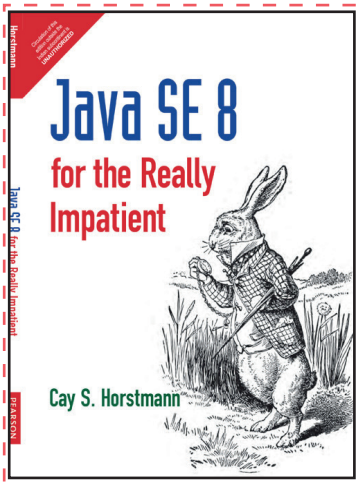
Features

- A fresh approach to mastering concurrent programming with Java's powerful library features.
- Includes a full chapter on the effective use of inheritance and interfaces.
- Thoroughly explains how to use Java's powerful, widely-anticipated Lambda expressions.
- By Cay Horstmann, co-author of the classic Java best-seller Core Java.

Contents

About the Author

Cay S. Horstmann is the author of Java SE 8 for the Really Impatient (Addison-Wesley, 2014), Scala for the Impatient (Addison-Wesley, 2012), is principal author of Core Java(TM), Volumes I and II, Ninth Edition (Prentice Hall, 2013), and has written a dozen other books for professional programmers and computer science students. He is a professor of computer science at San Jose State University and is a Java Champion.



Java SE 8 for the Really Impatient, 1/e

Cay S. Horstmann

NEW

ISBN: 9789332539082 | © Year: 2014 | Pages: 232

About the Book

Eagerly anticipated by millions of programmers, Java SE 8 is the most important Java update in many years. The addition of lambda expressions (closures) and streams represents the biggest change to Java programming since the introduction of generics and annotations.

Now, with Java SE 8 for the Really Impatient, internationally renowned Java author Cay S. Horstmann concisely introduces Java 8's most valuable new features (plus a few Java 7 innovations that haven't gotten the attention they deserve). If you're an experienced Java programmer, Horstmann's practical insights and sample code will help you quickly take advantage of these and other Java language and platform improvements. This indispensable guide includes

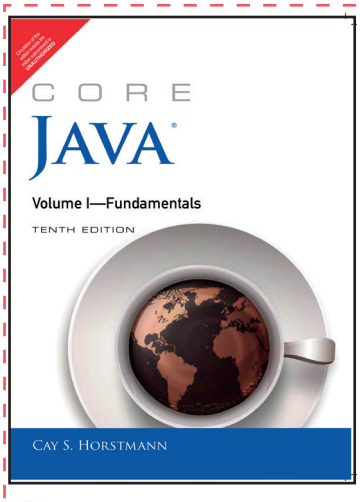
Features

- By world-renowned Java programmer, author, and instructor Cay S. Horstmann (co-author of the legendary best-seller Core Java)
- Reflects the most exciting new release of Java in five years, and major community-generated improvements in Project Lambda
- Fully explains Java SE 8's concurrency enhancements, Java/JavaScript integration, and migration from Swing to JavaFX

Contents

About the Authors

Cay S. Horstmann is the author of Scala for the Impatient (Addison-Wesley, 2012), is principal author of Core Java™, Volumes I and II, Ninth Edition (Prentice Hall, 2013), and has written a dozen other books for professional programmers and computer science students. He is a professor of computer science at San Jose State University and is a Java Champion..



Core Java Volume I Fundamentals, 10/e

Cay S. Horstmann

New Edition

ISBN: 9789332582712 | © Year: 2017 | Pages: 1040

About the Book

As the leading no-nonsense tutorial and reliable reference, this book carefully explains the most important language and library features and shows how to build real-world applications with thoroughly tested examples. Core Java Volume I Fundamentals walks students through the all details and takes a deep dive into the most critical features of the language and core libraries.

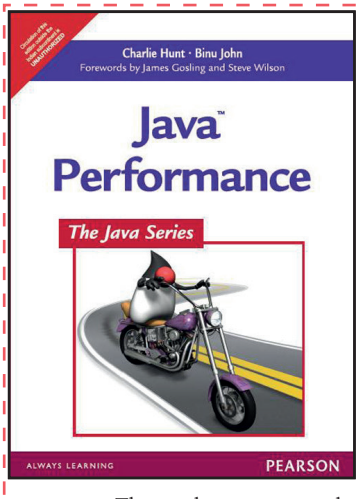
Features

- Major revision of bestselling Java book for experienced programmers!
- Completely updated for new features in Java SE8
- Covers the most significant update to Java in 10 years
- One of the best-selling Java books of all time

Contents

About the Author

Cay S. Horstmann is author of Core Java® for the Impatient (2015), Java SE 8 for the Really Impatient (2014), and Scala for the Impatient (2012), all from Addison-Wesley. He has written more than a dozen other books for professional programmers and computer science students. He is a professor of computer science at San Jose State University and is a Java Champion.



Java Performance, 1/e

Charlie Hunt • Binu John

ISBN: 9788131774267 | © Year: 2011 | Pages: 720

About the Book

"The definitive master class in performance tuning Java applications…if you love all the gory details, this is the book for you."

– *James Gosling*, creator of the Java Programming Language

Improvements in the Java platform and new multicore/multiprocessor hardware have made it possible to dramatically improve the performance and scalability of Java software.

Java™ Performance covers the latest Oracle and third-party tools for monitoring and measuring performance on a wide variety of hardware architectures and operating systems. The authors present dozens of tips and tricks you'll find nowhere else.

You'll learn how to construct experiments that identify opportunities for optimization, interpret the results, and take effective action. You'll also find powerful insights into microbenchmarking–including how to avoid common mistakes that can mislead you into writing poorly performing software. Then, building on this foundation, you'll walk through optimizing the Java HotSpot VM, standard and multitiered applications; Web applications, and more.

Features

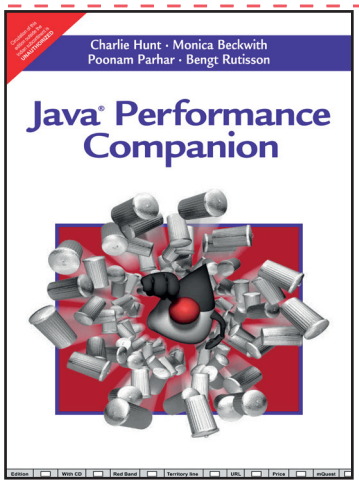
The ONLY complete, up-to-date guide to all aspects of Java performance on multicore systems

- The first one-stop guide to identifying, isolating, and fixing Java performance issues on multicore and multiprocessor processor platforms - from three of Sun's leading Java performance experts.
- Includes crucial new insights into microbenchmarking found nowhere else.
- Contains up-to-the-minute coverage of Java 6 optimization, including migration of older applications.

Contents

About the Authors

Charlie Hunt is the JVM performance lead engineer at Oracle. He is responsible for improving the performance of the HotSpot JVM and Java SE class libraries. He has also been involved in improving the performance of the Oracle GlassFish and Oracle WebLogic Server. A regular JavaOne speaker on Java performance, he also coauthored NetBeansâ„¢ IDE Field Guide (Prentice Hall, 2005). Binu John is a senior performance engineer at Ning, Inc., where he focuses on improving the performance and scalability of the Ning platform to support millions of page views per month. Before that, he spent more than a decade working on Java-related performance issues at Sun Microsystems, where he served on Sun's Enterprise Java Performance team. John has contributed to developing industry standard benchmarks such as SPECjms2007 and SPECJAppServer2010; published several performance whitepapers; and contributed to java.net's XMLTest and WSTest benchmark projects.



Java Performance Companion, 1/e

Charlie Hunt

NEW

ISBN: 9789332575103 | © Year: 2016 | Pages: 184

About the Book

World-class Java performance experts present detailed information on common top-down (application-centric) tuning and bottom-up (hardware/OS centric) approaches, with solid coverage of Windows, Linux, and Solaris. They show how to improve performance by applying state-of-the-art software engineering practices, and how to avoid common mistakes that can lead to writing poorly performing software. Throughout, there are dozens of Java performance tips and tricks available nowhere else.

Features

- Reliable guidance on modern Java performance monitoring, profiling, HotSpot tuning, and Java EE application performance tuning.
- Presents a well-proven methodology for identifying, isolating, and fixing Java application performance issues on multicore platforms.
- Contains up-to-date guidance on properly utilizing Java language features to maximize performance and scalability on modern platforms.
- Shows how to write effective microbenchmarks and identify potential problems with them.

Contents

About the Author

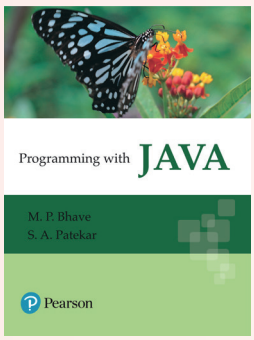
Charlie Hunt, is a JVM Performance Engineer at Oracle where he works on the performance of Java SE, Java EE, Java HotSpot VM, and Java SE class libraries. He presents on Java performance at various events, including JavaOne, QCon, Velocity, and Dreamforce, and he coauthored Java Performance (Addison-Wesley, 2012).

Monica Beckwith is an independent performance consultant optimizing customer applications for server class systems running the Java Virtual Machine. She has worked with Java HotSpot VM optimizing the JIT Compiler, the generated code, the JVM heuristics and garbage collection and collectors. Monica led Oracle's Garbage First Garbage Collector performance team and was named a JavaOne Rock Star.

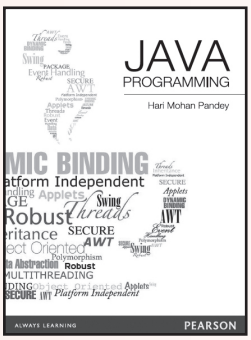
Poonam Parhar is a JVM Sustaining Engineer at Oracle, where her primary responsibility is to resolve customer-escalated problems against Oracle JRockit and Java HotSpot VMs. She loves debugging and troubleshooting problems, and is always focused on improving the serviceability and supportability of the JVM.

Bengt Rutisson is a JVM Engineer at Oracle, working in the HotSpot VM team. He has worked on garbage collections in JVMs for the past ten years, first with the Oracle JRockit VM and the last six years with the Java HotSpot VM. Bengt is an active participant in the OpenJDK project, with many contributions of features, stability fixes and performance enhancements.

Also Available

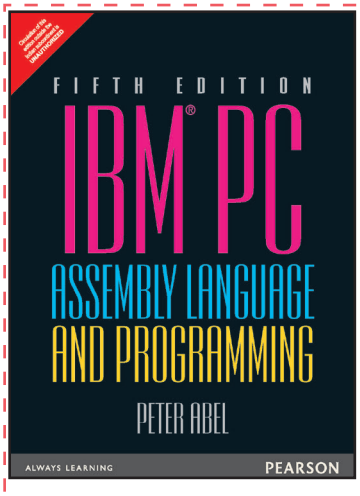


ISBN: 9788131720806
Pages: 748



ISBN: 9788131733110
Pages: 880

ISBN: 9788131755440
Pages: 492



IBM PC Assembly Language and Programming, 5/e

Peter Abel

ISBN: 9789332549302 | © Year: 2015 | Pages: 545

About the Book

Abel has designed the text to serve as both tutorial and reference, covering a full range of programming levels so as to learn assembly language programming. Coverage starts from scratch, discussing the simpler aspects of the hardware and the language, then introduces technical details and instructions as they are needed.

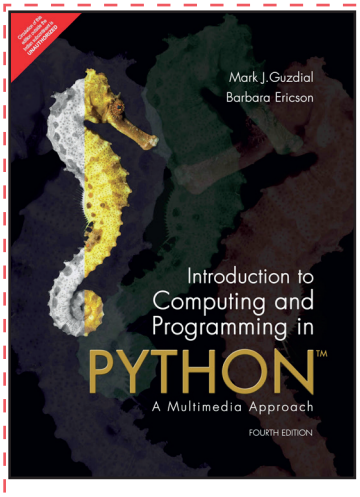
Features

- NEW - More features of the Intel Pentium Processor.
- NEW - Additional program examples and exercises.
- NEW - Earlier introduction to interrupt operations.
- NEW - Additional material on protected mode, passing parameters, the use of the stack, addressing modes, video systems and INT 10H functions, array handling, subprograms and ports.
- Step-by-step introduction to Intel microprocessors, machine language, and assembly language.
- Tracing execution of elementary programming in machine language.
- Hands-on approach through the text.
- DEBUG used in early examples.
- Many short examples and full program examples provided.

Contents

About the Author

Peter Abel, North Vancouver, BC, Canada.



Introduction to Computing and Programming in Python: A Multimedia Approach , 4/e

Mark J Guzdial • Barbara Ericson

NEW

ISBN: 9789332556591 | © Year: 2015 | Pages: 528

About the Book

Introduction to Computing and Programming in Python is a uniquely researched and up-to-date volume that is widely recognized for its successful introduction to the subject of Media Computation. Emphasizing creativity, classroom interaction, and in-class programming examples, Introduction to Computing and Programming in Python takes a bold and unique approach to computation that engages students and applies the subject matter to the relevancy of digital media. The Fourth Edition teaches students to program in an effort to communicate via social computing outlets, providing a unique approach that serves the interests of a broad range of students.

Also Available with MyProgrammingLab®

This title is also available with MyProgrammingLab — an online homework, tutorial, and assessment program designed to work with this text to

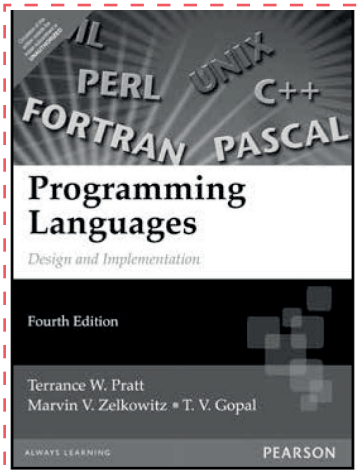
engage students and improve results. Within its structured environment, students practice what they learn, test their understanding, and pursue a personalized study plan that helps them better absorb course material and understand difficult concepts.

Students, if interested in purchasing this title with MyProgrammingLab, ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information.

Features

- Brief JavaScript introduction helps ease students into learning a second programming language.
- Learning objectives at the start of each cover media learning objectives and computer science learning objectives to acquaint students with the importance of both sides of chapter concepts.
- REVISED! End-of-chapter questions have been added and enhanced to provide solid review for students.
- Four types of boxed Items throughout the text Include CS Key Ideas, Common Bugs, Debugging Tips, and "Making It Work" tips on how to study and be successful at computer science.

Contents



Programming Languages: Design and Implementation, 4e

Terrence W. Pratt • Marvin V. Zelkowitz • T. V. Gopal

ISBN: 9788177586886 | © Year: 2006 | Pages: 608

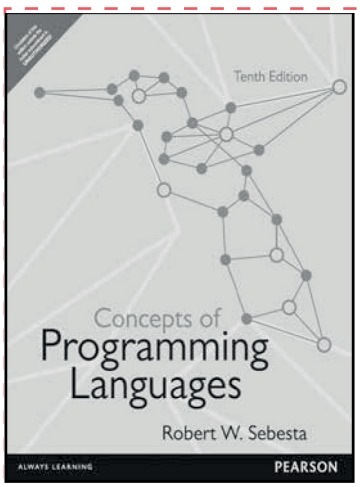
About the Book

It provides programmers with the perspective to develop correct and efficient software. It lays emphasis on the World Wide Web and its impact on programming. More information is included on distributed computing and client/server algorithms. New topics include Java, HTML web page design, CGI scripts, and the PERL and Postscript languages.

Features

- Brief summaries are given of 11 languages: Ada, C, C++, FORTAN, Java, LISP, ML, Pascal, Postscript, Prolog, and Smalltalk. There is also additional information on HTML and PERL.
- The text is not oriented to any one language. Examples of language constructs are given in several languages to demonstrate their universality. All examples have been tested on an appropriate translator.
- Many different models of program design are covered: algebraic procedural language, applicative programming, logic programming, object-oriented programming, distributed and client/server programming, web page development, and text processing applications.
- The text is comprehensive. Chapters 1 and 2 provide a review of background material, and sections on language semantics, compilers and parallel programming provide additional topics for the advanced student.
- The primary focus of this book is on Software Development.

Contents



Concepts of Programming Languages, 10/e

Robert W. Sebesta

ISBN: 9789332518872 | © Year: 2013 | Pages: 792

About the Book

Concepts of Computer Programming Languages introduces students to the fundamental concepts of computer programming languages and provides them with the tools necessary to evaluate contemporary and future languages. An in-depth discussion of programming language structures, such as syntax and lexical and syntactic analysis, also prepares students to study compiler design.

The Eleventh Edition maintains an up-to-date discussion on the topic with the removal of outdated languages such as Ada and Fortran. The addition of relevant new topics and examples such as reflection and exception handling in Python and Ruby add to the currency of the text.

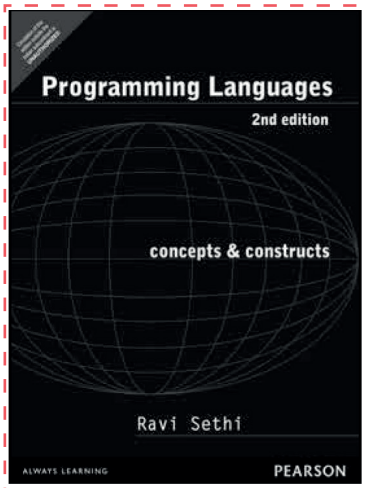
Features

- The fundamental concepts of programming languages are taught through detailed examination of specific languages.
- Chapter 4 discusses the important topics of lexical and syntactical analysis and can stand alone from the rest of the book as its own source material.
- Chapters 5-14 discuss in detail the design issues of contemporary programming languages, using specific examples to demonstrate each.
- Chapter 12 has been substantially revised with new sections and paragraphs, including an added a section on reflection with two complete program examples and a table of design choices of common languages that support object-oriented programming.
- Valuable historical foundations that set out the origins, purposes, and contributions of the most important languages discussed in the rest of the text are introduced early on.
- In-depth discussions of the design issues faced by the early versions of relevant languages are presented in later chapters.

Contents

About the Author

Robert W. Sebesta is an Associate Professor Emeritus in the Computer Science Department at the University of Colorado–Colorado Springs. Professor Sebesta received a BS in applied mathematics from the University of Colorado in Boulder and MS and PhD degrees in computer science from Pennsylvania State University. He has taught computer science for more than 40 years.



Programming Languages: Concepts & Constructs, 2/e

Ravi Sethi

ISBN: 9788177584226 | © Year: 2006 | Pages: 496

About the Book

The second edition of **Programming Languages—Concepts & Constructs** retains the "character" of the original emphasizing concepts and how they work together. This book has been thoroughly revised and updated to stay current with advances in programming languages. With an excellent exposition, the core concepts of imperative programming in languages like C flows smoothly into object-oriented programming in C++ and Smalltalk. The charm of functional languages is illustrated by the Scheme dialect of Lisp while logic programming is introduced using Prolog. Novices, who have been introduced to programming in some language, will learn to create simple programs and utilize the power of each language, while designers and implementers will be exposed to major programming paradigms.

Features

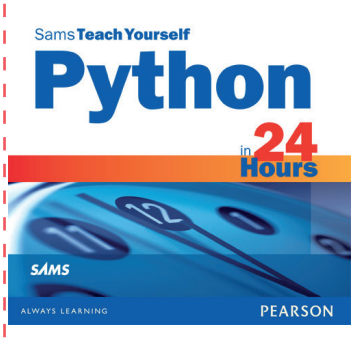
- Organized into parts with self-contained coverage of major programming paradigms.
- Expanded discussion of object-oriented programming.
- Thorough revision of imperative and functional programming with new chapters on data types.

Contents

About the Authors

Ravi Sethi, director of Computing Science Research, has been at AT&T Bell Laboratories in Murray Hill, New Jersey since 1976. He has held teaching positions at Pennsylvania State University and the University of Arizona, and has taught at Princeton University and Rutgers. Dr. Sethi is co-author of the "dragon book", Compilers: Principles, Techniques and Tools and has written numerous articles. His books have been translated in Japanese, German, French, Italian, Spanish, and Korean.

K. V. Viswanatha is Professor in Computer Science Department, Rashtriya Vidhyalaya College of Engineering (RVCE), Bangalore, India. He received his Ph.D in device simulation in 1975 from I.I.Sc., Bangalore, India. His research areas include programming languages, algorithms, and operating systems.



Python in 24 Hours: Sams Teach Yourself, 2/e

Katie Cunningham

NEW

ISBN: 9789332536029 | © Year: 2014 | Pages: 320

About the Book

In just 24 sessions of one hour or less, Sams Teach Yourself Python in 24 Hours will help you get started fast, master all the core concepts of programming, and build anything from websites to games. Using this book's straightforward, step-by-step approach, you'll move from the absolute basics through functions, objects, classes, modules, database integration, and more. Every lesson and case study application builds on what you've already learned, giving you a rock-solid foundation for real-world success!

Features

The perfect guide for programming beginners who want to get started with a language that's both powerful and easy: Python

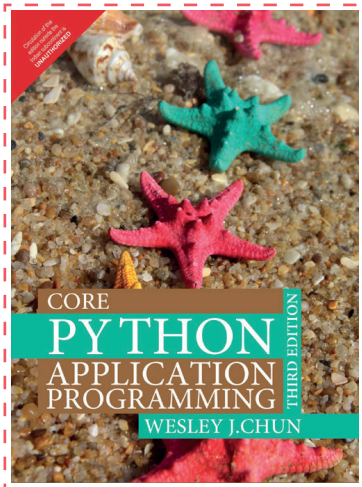
- Assumes absolutely no experience: guides you through installation, working at the command prompt/terminal, and all the core concepts of programming.
- Teaches through a running book-length example any reader can relate to: writing code to support a pizzeria.
- Practical examples focus on helping you master useful tools and techniques as soon as possible.

Contents

About the Author

Katie Cunningham is a Python developer at Cox Media Group. She's a fervent advocate for Python, open source software, and teaching people how to program. She's a frequent speaker at open source conferences, such as PyCon and DjangoCon, speaking on beginners' topics such as someone's first site in the cloud and making a site that is accessible to everyone.

She also helps organize PyLadies in the DC area, a program designed to increase diversity in the Python community. She has taught classes for the organization, bringing novices from installation to writing their first app in 48 hours.



Core Python Applications Programming, 3/e

Wesley J. Chun

ISBN: 9789332555365 | © Year: 2016 | Pages: 800

About the Book

Python is an agile, robust, and expressive programming language that continues to build momentum. It combines the power of compiled languages with the simplicity and rapid development of scripting languages. This book has everything you need to become a versatile Python developer. You will be introduced to multiple areas of application development and gain knowledge that can be immediately applied to projects, and you will find code samples in both Python 2 and 3, including migration tips if that's on your roadmap too. Some snippets will even run unmodified on 2.x or 3.x.

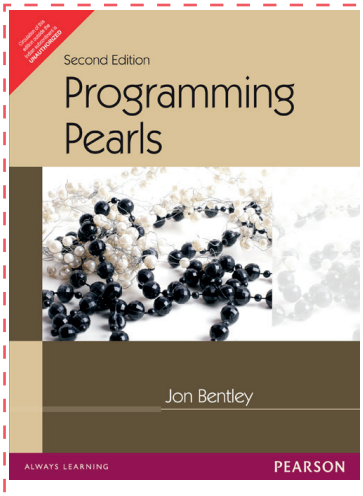
Features

- Expert core features coverage, plus powerful insights for crafting complex software.
- New chapters on programming MS Office and Google App Engine.
- Dozens of professional-quality code examples.
- Easy reference tables detail modules, operators, functions, and methods.

Contents

About the Author

Wesley J. Chun has more than twenty-five years of programming, teaching, and writing experience, including more than a decade of Python. While at Yahoo!, he helped create Yahoo! Mail and Yahoo! People Search using Python. He holds degrees in computer science, mathematics, and music from the University of California. In addition to being an architect and Developer Advocate at Google, he runs CyberWeb (cyberwebconsulting.com), a consulting business specializing in Python engineering and technical training.



Programming Pearls, 2/e

Jon Bentley

ISBN: 9788177588583 | © Year: 2000 | Pages: 256

About the Book

In this revision, the first in 14 years, Bentley has substantially updated his essay to reflect current programming methods and environments. In addition, there are three new essays on (1) testing, debugging, and timing; (2) set representations; and (3) string problems. All he original programs have been rewritten, and an equal amount of new code has been generated. Implementations of all the programs, in C or C++, are now available on the Web. What remains the same in this new edition is Bentley's focus on the hard core of programming and his delivery of workable solutions to those problems. â€˜Whether you are new to Bentley's classic or are revisiting his work for some fresh insight, the book is sure to make your own list of favorites.

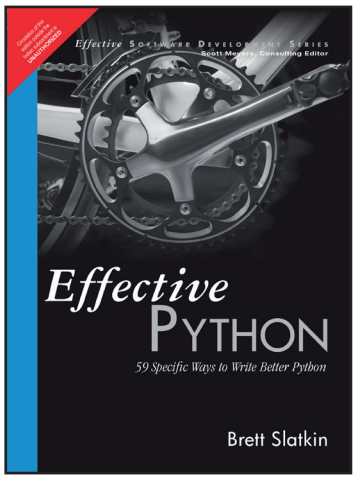
Features

- Illustrated by programs designed as much for fun as for instruction, the book is filled with lucid and witty descriptions of practical programming techniques and fundamental design principles.
- Three new essays on testing, debugging, and timing; set representations and string problems.
- All the original programs have been rewritten, and an equal amount of new code has been generated.

Contents

About the Author

Jon Bentley is Member of Technical Staff in the Computing Sciences Research Center at Bell Labs/ Lucent Technologies in Murray Hill New Jersey. Jon has been a Contributing Editor of Dr. Dodd's Journal since 1998 Hos â€œProgramming Pearls column in the Communications of the ACM, on which book is based,was for many years one of the most popular features of that periodical.



Effective Python: 59 Specific Ways to Write Better Python, 1/e

Brett Slatkin

NEW

ISBN: 9789332552364 | © Year: 2015 | Pages: 248

About the Book

Effective Python will help students harness the full power of Python to write exceptionally robust, efficient, maintainable, and well-performing code. Utilizing the concise, scenario-driven style pioneered in Scott Meyers's best-selling Effective C++, Brett Slatkin brings together 53 Python best practices, tips, shortcuts, and realistic code examples from expert programmers. Each section contains specific, actionable guidelines organized into items, each with carefully worded advice supported by detailed technical arguments and illuminating examples.

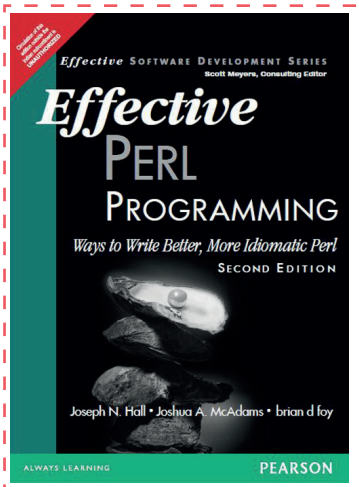
Features

- Covers Python algorithms, objects, concurrency, collaboration, built-in modules, and much more.
- Addresses both Python 3 and Python 2.
- Guides students to a far deeper understanding of the Python language, so they know why its unique idioms and rules of thumb make sense.
- Follows the enormously popular "Effective" format proven in Scott Meyers' classic Effective C++.

Contents

About the Author

Brett Slatkin, senior staff software engineer at Google, is engineering lead and co-founder of Google Consumer Surveys. He previously worked on Google App Engine's Python infrastructure, leveraged Python to manage Google's enormous server fleet, and used Python to implement Google's system for PubSubHubbub, a protocol he co-created. Slatkin holds a B.S. in computer engineering from Columbia University in the City of New York. He lives in San Francisco.



Effective Perl Programming: Ways to Write Better, More Idiomatic Perl, 2/e

Joseph N. Hall • Brian D Foy • Joshua A McAdams

ISBN: 9788131774250 | © Year: 2011 | Pages: 496

About the Book

The Classic Guide to Solving Real-World Problems with Perl—Now Fully Updated for Today's Best Idioms!

For years, experienced programmers have relied on Effective Perl Programming to discover better ways to solve problems with Perl. Now, in this long-awaited second edition, three renowned Perl programmers bring together today's best idioms, techniques, and examples: everything you need to write more powerful, fluent, expressive, and succinct code with Perl.

Nearly twice the size of the first edition, Effective Perl Programming, Second Edition, offers everything from rules of thumb to avoid common pitfalls to the latest wisdom for using Perl modules. You won't just learn the right ways to use Perl: You'll learn why these approaches work so well.

Features

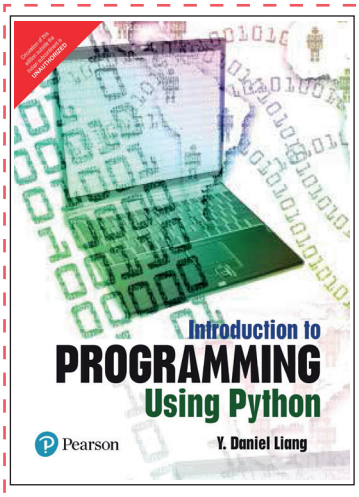
The highly-anticipated update to this classic book - now fully reflects today's most powerful idioms and adds nine new chapters!

- Packed with carefully-explained examples that show how to write Perl code like the experts do -- and why.
- New chapters on CPAN, databases, debugging, distributions, external processes, files, production Perl, testing, and Unicode.
- Follows Scott Meyers' best-selling Effective C format.
- An indispensable resource for every experienced Perl programmer.

Contents

About the Author

Joseph N. Hall has programmed for a living since 1984, taught his first computer class at age fourteen, and has worked with Perl since 1993. Joshua A. McAdams, a programmer at Google, is the voice of Perlcast. He has hosted two Perl conferences, conducts meetings for Chicago Perl Mongers, has spoken about Perl at events worldwide, and is a CPAN author. Brian D Foy is coauthor of Learning Perl, Fifth Edition (O'Reilly Media, 2008), and Intermediate Perl (O'Reilly Media, 2006), and author of Mastering Perl (O'Reilly Media, 2007). He established the first Perl user group, the New York Perl Mongers; publishes The Perl Review; maintains parts of the core Perl documentation; and has more than ten years of Perl training experience.



Introduction to Programming Using Python, 1/e

Y. Daniel Liang

NEW

ISBN: 9789332551848 | © Year: 2017 | Pages: 576

About the Book

Introduction to Programming Using Python is intended for use in the introduction to programming course.

Daniel Liang is known for his "fundamentals-first" approach to teaching programming concepts and techniques. "Fundamentals-first" means that students learn fundamental programming concepts like selection statements, loops, and functions, before moving into defining classes.

Another aspect of Introduction to Programming Using Python is that in addition to the typical programming examples that feature games and some math, Liang gives an example or two early in the chapter that uses a simple graphic to engage the students.

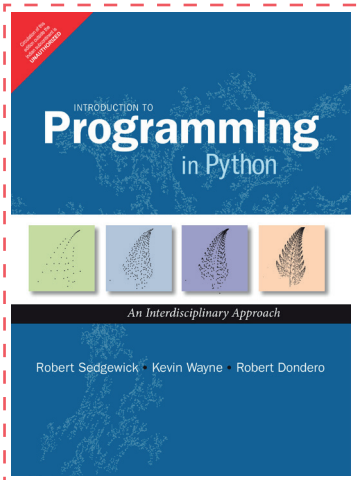
Features

- Fundamentals-first approach introduces basic programming concepts and techniques on selections, loops, functions, before writing custom classes.
- Problem-driven approach teaches programming in a problem-driven way that focuses on problem solving rather than syntax.
- Flexible GUI Coverage gives instructors the flexibility to skip graphics topics, or cover these topics later in the course.
- The book use Python's built-in Turtle graphics module in Chapters 1-6 and Tkinter in the rest of the book.
- Both Turtle and Tkinter are simple, easy to learn, and valuable pedagogical tools for teaching the fundamentals of programming and object-oriented programming.

Contents

About the Author

Dr. Liang earned his Ph.D. in Computer Science from the University of Okalahoma in 1991, and an MS and BS in Computer Science from Fudan University in Shanghai, China, in 1986 and 1983. Prior to joining Armstrong, he was an associate professor in computer science at Purdue University in Fort Wayne, where he twice received the Excellence in Research award.



Introduction to Programming in Python: An Interdisciplinary Approach, 1/e

Robert Sedgewick • Kevin Wayne • Robert Dondero

NEW

ISBN: 9789332577435 | © Year: 2016 | Pages: 792

About the Book

Introduction to Programming in Python: An Interdisciplinary Approach emphasizes interesting and important problems, not toy applications. The authors focus on Python's most useful and significant features, rather than aiming for exhaustive coverage that bores novices. All of this book's code has been crafted and tested for compatibility with both Python 2 and Python 3, making it relevant to every programmer and any course, now and for many years to come.

Features

- A broad-based, applications-based approach: teaches Python through examples from science, mathematics, engineering, and commercial computing.
- Focuses on what matters most: the most useful and important Python language features.
- Teaches through code tested for compatibility with Python 2.x and Python 3.x.
- Includes question-and-answer sections, exercises, and creative exercises throughout.

Contents

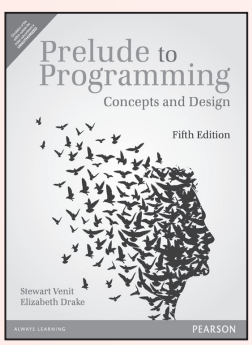
About the Authors

Robert Sedgewick is the William O. Baker professor of computer science at Princeton University. He has held visiting research positions at several advanced research laboratories and serves on the Adobe Systems board. He is also the coauthor (with Kevin Wayne) of Introduction to Programming in Java and Algorithms, Fourth Edition (both from Addison-Wesley).

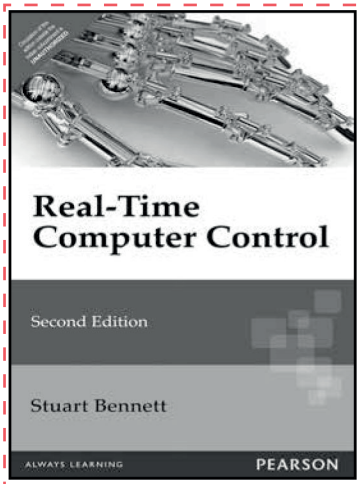
Kevin Wayne is the Phillip Y. Goldman senior lecturer in computer science at Princeton University, where he has taught since 1998. He is an ACM Distinguished Educator and holds a Ph.D. in operations research and industrial engineering from Cornell University.

Robert Dondero is a lecturer in computer science at Princeton University. He has taught there since 2001, earning eight excellence in engineering education awards, and a lifetime achievement award for excellence in teaching. He holdsa Ph.D. in information science and technology from Drexel University.

Also Available



ISBN: 9789332518766
Pages: 540



Real-Time Computer Control, 2/e

Stuart Bennett

ISBN: 9788131713884 | © Year: 2003 | Pages: 432

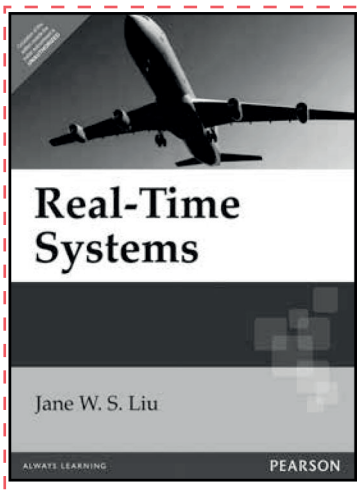
About the Book

This fully updated textbook deals with techniques relating to the use of embedded computers in complex engineering systems. The emphasis is on practical techniques for specifying, designing and implementing real-time computer control systems. It is suitable for advanced undergraduate and postgraduate courses and for practising engineers.

Features

- Survey of computer control strategies and an overview of the hardware and software available for their implementation.
- An introduction to the practicalities of implementing control algorithms on a digital computer.
- Introduction to a range of methodologies for specifying and designing real-time systems: these include the Yourdon, MASCOT and PAISLey methodologies.
- Detailed consideration of concurrency problems and of multi-tasking features of real-time languages.
- Consideration of scheduling problems and real-time operating systems.
- An introduction to fault tolerance.
- In-text examples and end-of-chapter exercises.

Contents



Real-Time Systems

Jane W. S. Liu

ISBN: 9788177585759 | © Year: 2002 | Pages: 624

About the Book

Written by a renowned expert, **Real-Time System** provides professionals and students with a comprehensive treatment of real-time computing and communication systems. The book covers the most recent advances in real-time operating systems and communications networks. Thus, this book serves as a vehicle for technology transition within the real-time system community of systems architects, designers chief scientists and technologists, and systems analysts. Jane Liu's subject mater and adept treatment provides an engaging learning environment for students as well. With real-time systems, the technologies at play include telecommunication, signal processing,

command and control, and digital control. Their applications have particular relevance to day-to-day operations, such as engine and break mechanisms in cars, traffic light operations, flight control and air-traffic control and heartbeat and blood pressure monitoring. This text describes not only how, but also why, through insightful illustrative examples. Real-Time Systems is both a valuable reference for professionals and an advanced text for Computer Science and Computer Engineering students.

Features

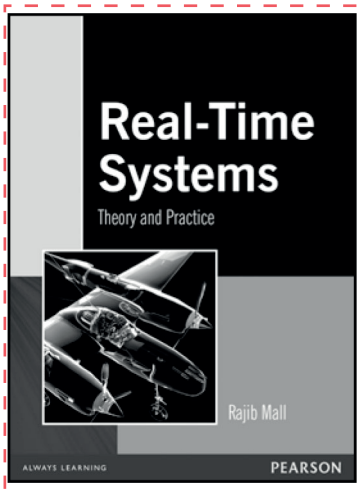
- Real world real-time applications based on research and practice.
- State-of-the-art algorithms and methods for validation
- Methods for end-to-end scheduling and resource management.
- More than 100 illustrations to enhance understanding.
- Comprehensive treatment of the technology known as RMA (rate-monotonic analysis) method.
- A supplemental Companion Website www.prenhall.com/liu the chapters.

Contents

1. Typical Real-Time Applications
2. Hard Versus Soft Real-Time Systems
3 A Reference Model of Real-Time Systems
4. Commonly Used Approaches to Real-Time Scheduling
5. Clock Driven Scheduling
6. Priority-Driven Scheduling of Periodic Tasks
7. Scheduling Aperiodic and Sporadic Jobs in Priority-Driven Systems
8. Resources and Resource Access Control
9. Multiprocessor Scheduling, Resources Access Control, and Synchronization
10. Scheduling Flexible Computations and Tasks with Temporal Distance Constraints
11. Real-Time Communication
12. Operating Systems

About the Author

Jane W.S. Liu received her M.S. And Sc.D. in Electrical Engineering from Massachusetts Institute of Technology, before joining the University of Illinois, where she currently teaches, Jane worked with industry. She serves on numerous program committees and on symposia and workshops on real-time systems. She is currently a member of ACM and a Fellow of IEEE. Dr. Liu's current research is concerned with the means to provide an open environment to real-time applications.



Real-Time Systems: Theory and Practice

Rajib Mall

ISBN: 9788131700693 | © Year: 2006 | Pages:242

About the Book

Although real-time systems are becoming increasingly important they are often so embedded that we fail to notice them even while interacting with them. An important characteristic of real-time systems is that their correctness is time- dependent. Examples of such systems range from safety-critical ones, such as nuclear reactors and automotive controllers, to entertainment software such as games and graphics animations. The growing importance of real-time systems has made it a core area for computer science, electronics and communication, as well as electrical engineering students. This book is designed to serve as a textbook for both graduate and post-graduate level courses on real-time systems. It can also serve as a reference for practising engineers.

Features

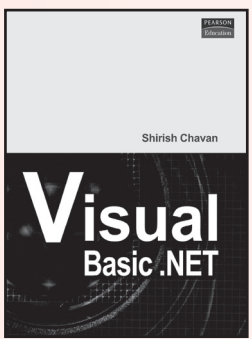
- Thorough coverage of real-time databases, operating systems and communications.
- Concepts explained through real-life applications.
- Numerous worked-out examples and practice problems.

Contents

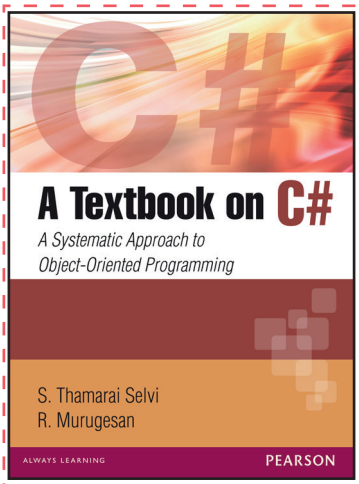
About the Author

Rajib Mall received his BE, ME, and Ph.D. from the Indian Institute of Science Bangalore. He has worked in a number of industries dealing with real-time system applications. He joined the faculty of the Department of Computer Science and Engineering at the Indian Institute of Technology Kharagpur in 1994, where he is now Professor. His research interests are software engineering, real-time systems, and sensor networks, in which fields he has published more than one hundred refereed papers.

Available Title in Visual Programming



ISBN: 9788131713914
Pages: 600



A TextBook on C#

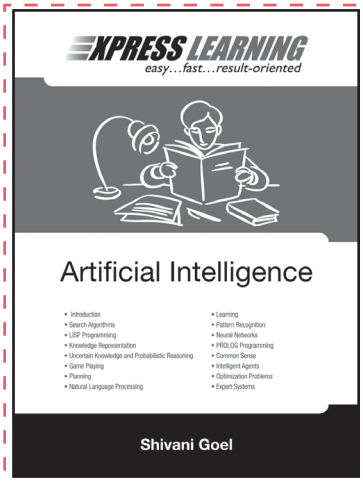
S. Thamarai Selvi • R. Murugesan

ISBN: 9788131764923 | © Year: 2011 | Pages: 552

About the Book

C# is a modern object-oriented programming language designed specifically to work with Microsoft .NET Platform.

The objective of this book is to introduce OOP concepts in a systematic manner and to explain the key features of C#. An invaluable textbook for beginners and a reference for the experienced programmers, it does not assume a prior knowledge of the programming language. The systematic approach followed in this book will help readers easily understand the concepts.



Express Learning - Artificial Intelligence

Shivani Goel

ISBN: 9788131787472 | © Year: 2013 | Pages: 296

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

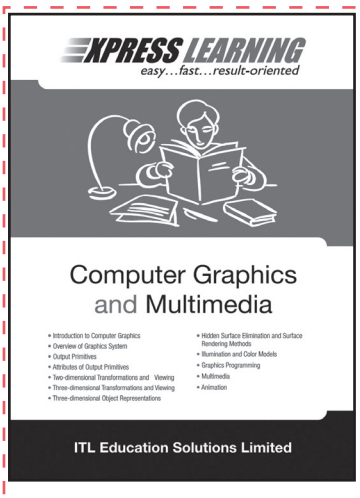
Features

- Presented in a question and answer format following the examination pattern.
- Covers all key topics in the syllabus.
- Designed to make learning fast and effective.
- Precise and up-to-date.
- Helps students excel in their examinations.

Contents

About the Author

Shivani Goel is Assistant Professor in Computer Science and Engineering Department at Thapar University, Patiala. She did her PhD from Thapar University, Patiala. Artificial Intelligence, Algorithms and Software Reuse are her areas of interest.



Express Learning - Computer Graphics and Multimedia

ITL Educational Solutions Limited

ISBN: 9788131785911 | © Year: 2013 | Pages: 352

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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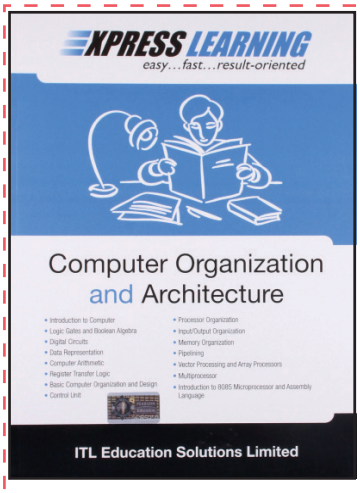
Contents

1. Introduction to Computer Graphics
2. Overview of Graphics System
3. Output Primitives
4. Attributes of Output Primitives
5. Two-dimensional Transformations and Viewing
6. Three-dimensional Transformations and Viewing
7. Three-dimensional Object Representations
8. Hidden Surface Elimination and Surface Rendering Methods
9. Illumination and Color Models
10. Graphics Programming
11. Multimedia
12. Animation

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Express Learning - Computer Organization and Architecture

ITL Education Solutions Limited

ISBN:9788131773390 | © Year: 2012 | Pages: 312

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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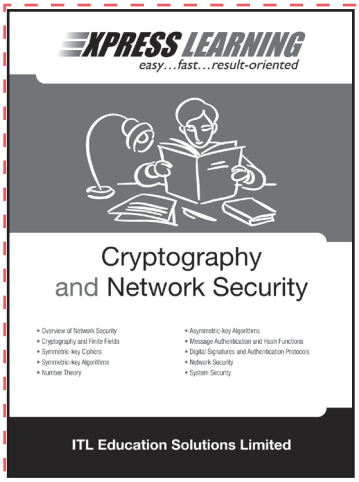
Contents

1. Introduction to Computer
2. Logic Gates and Boolean algebra
3. Digital Circuits
4. Data Representation
5. Computer Arithmetic
6. Register Transfer Logic
7. Basic Computer Organization and Design
8. Control Unit
9. Processor Organization
10. Input /Output Organization
11. Memory Organization
12. Pipelining
13. Vector Processing and Array Processors
14. Multiprocessor
15. Introduction to 8085 Microprocessor and Assembly Language



Express Learning – Cryptography and Network Security

ITL Educational Solutions Limited

ISBN: 9788131764527 | © Year: 2012 | Pages:196

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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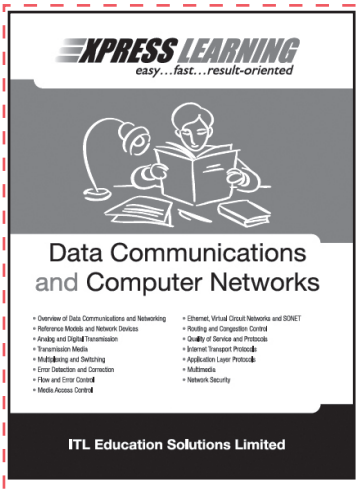

Express Learning – Data Communications and Computer Networks

ITL Educational Solutions Limited

ISBN: 9788131761274 | © Year: 2012 | Pages: 312

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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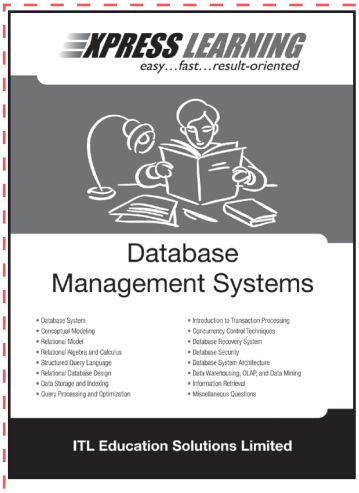

Express Learning – Database Management Systems

ITL Educational Solutions Limited

ISBN: 9788131760802 | © Year: 2012 | Pages: 336

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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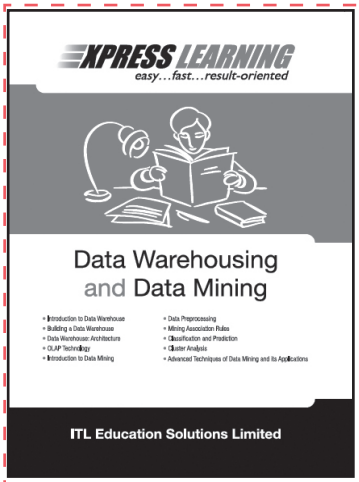

Express Learning - Data Warehousing and Data Mining

ITL Education Solutions Limited

ISBN: 9788131773406 | © Year: 2012 | Pages: 272

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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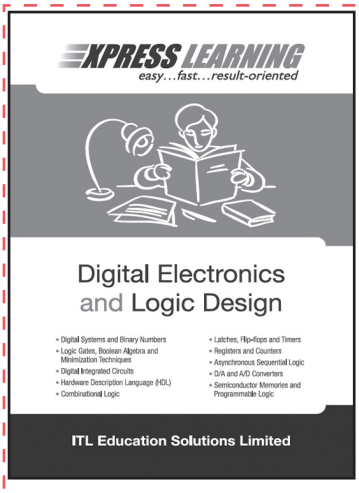

Express Learning – Digital Electronics and Logic Design

ITL Educational Solutions Limited

ISBN: 9788131787045 | © Year: 2013 | Pages: 352

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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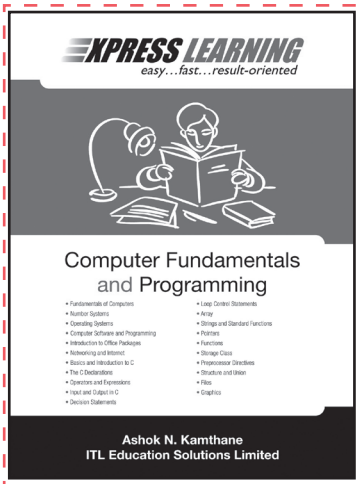

Express Learning - Computer Fundamentals and Programming

Kamthane • ITL Educational Solutions Limited

ISBN: 9788131794791 | © Year: 2013 | Pages: 464

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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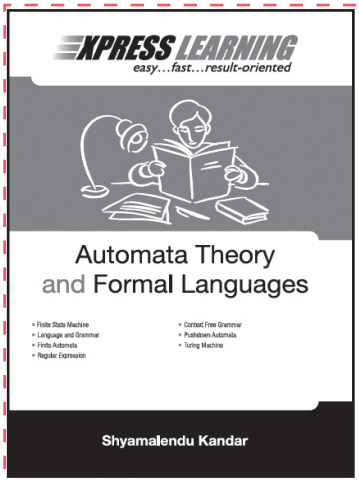
- Helps students excel in their examinations.

Contents

About the Authors

Ashok N. Kamthane is Associate Professor, Department of Electronics and Telecommunication at SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 20 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines. Prof. Kamthane is also the author of bestselling book, Programming in C.

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Express Learning – Automata Theory and Formal Languages

Shyamalendu Kandar

ISBN: 9788131760772 | © Year: 2012 | Pages: 376

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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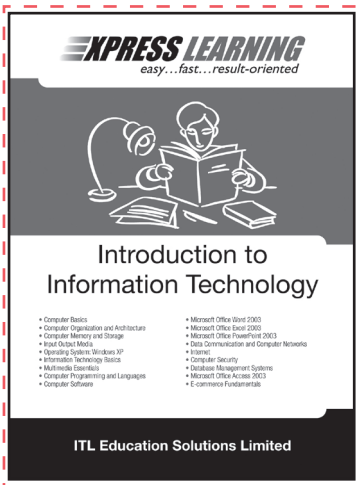
- Helps students excel in their examinations.

Contents

About the Author

Shyamalendu Kandar is Assistant Professor of Computer Science and Engineering at Haldia Institute of Technology, Haldia.



Express Learning – Introduction to Information Technology

ITL Educational Solutions Limited

ISBN: 9788131769737 | © Year: 2012 | Pages: 408

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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Contents

1. Computer Basics
2. Computer Organization and Architecture
3. Computer Memory and Storage
4. Input Output Media
5. Operating System: Windows XP
6. Information Technology Basics
7. Multimedia Essentials
8. Computer Programming and Languages
9. Computer Software
10. Microsoft Office Word 2003
11. Microsoft Office Excel 2003
12. Microsoft Office PowerPoint 2003
13. Data Communication and Computer Networks
14. Internet
15. Computer Security
16. Database Management Systems
17. Microsoft Office Access 2003
18. E-commerce Fundamentals

About the Author

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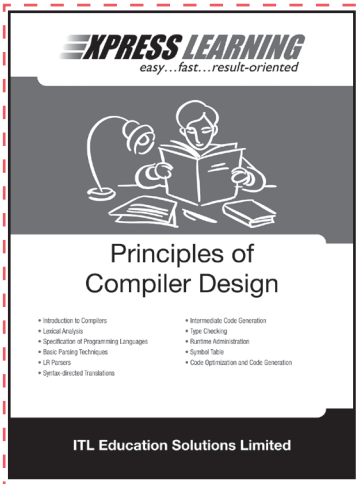

Express Learning - Principles of Compiler Design

ITL Educational Solutions Limited

ISBN:9788131761267 | © Year: 2012 | Pages: 184

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

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Contents

1. Introduction to Compilers
2. Lexical Analysis
3. Specification of Programming Languages
4. Basic Parsing Techniques
5. LR Parsers
6. Syntax-directed Translations
7. Intermediate Code Generation
8. Type Checking
9. Runtime Administration
10. Symbol Table
11. Code Optimization and Code Generation

About the Author

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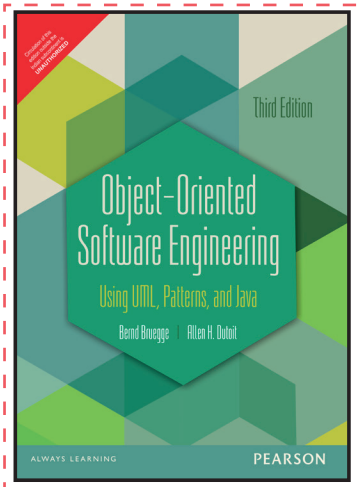


Object-Oriented Software Engineering: Using UML, Patterns and Java, 3e

Bernd Bruegge • Allen H. Dutoit

ISBN: 9789332518681 | © Year: 2013 | Pages: 722

About the book

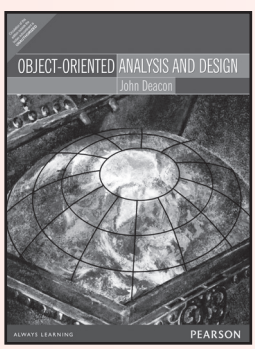
Using a step-by-step case study to illustrate the concepts and topics in each chapter, Bruegge and Dutoit emphasize learning object-oriented software engineer through practical experience: readers can apply the techniques learned in class by implementing a real-world software project.

Features

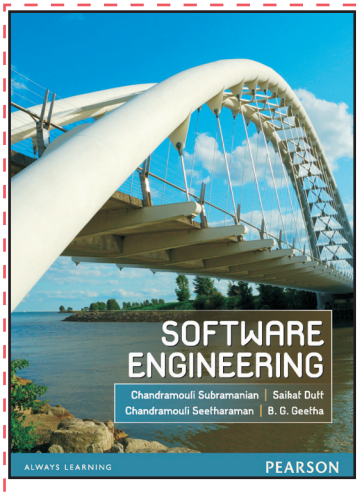
- NEW! A comprehensive upgrade to the latest version of UML and OCL. All diagrams were checked and revised to take advantage of the latest development in UML. Chapters on System Design and Object Design now include new material on component diagrams and modeling of services.
- NEW! Material on agile methods. The chapter on "Configuration Management" describes continuous integration; the chapter on "Project Management" covers Scrum; the chapter on "Methodologies" contrasts agile methodologies--such as XP, Scrum, and Rugby--with traditional methodologies based on the Unified process.
- NEW! Material on U2TP. The chapter on "Testing" includes new material on modeling the test system, test automation, and the UML2 Testing Profile.
- UPDATED! Examples. The examples in the new edition are updated and improved based on feedback from many readers and students.

Content:

Also Available



ISBN: 9788131726068
Pages: 636



Software Engineering

Chandramouli Subramanian • Saikat Dutt
Chandramouli Seetharaman • B. G. Geetha

NEW

ISBN: 9789332537293 | © Year: 2013 | Pages: 966

About the Book

This book addresses basic and advanced concepts in software engineering and is intended as a textbook for an undergraduate-level engineering course. In addition to covering important concepts in software engineering, this book also addresses the perspective of decreasing the overall effort of writing quality software. It covers the entire spectrum of the software engineering life cycle starting from the requirement analysis until the implementation and maintenance of the project.

Features

- Covers important software engineering topics with a special focus.
- Covers important software engineering topics with a special focus on Software Testing, Software Project Management and Agile Concepts.
- Features such as Discussion Points and Points to Ponder help in clarifying concepts and promoting critical thinking.
- Includes five case studies on software engineering practices.
- Includes a model solved question paper.
- Includes more than 700 exercise and examples.

Contents

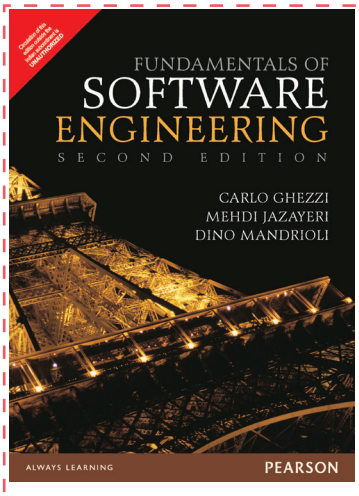
About the Authors

S. Chandramouli, Senior Manager in Cognizant Technology Solutions, Chennai.

Saikat Dutt, Director in Cognizant Technology Solutions, Kolkata.

Chandramouli Seetharaman is currently the Founder-Director of CATALYSTS.

Dr B. G. Geetha, Professor and Head, Department of Computer Science, K. S. Rangasamy College of Technology, Tiruchengode.



Fundamentals of Software Engineering, 2/e

Carlo Ghezzi • Mehdi Jazayeri • Dino Mandrioli

ISBN: 9789332555396 | © Year: 2013 | Pages: 966

About the Book

Appropriate for both undergraduate and graduate introductory software engineering courses found in Computer Science and Computer Engineering departments.
This text provides ive, in-depth coverage of the fundamentals of software engineering by stressing principles and methods through rigorous formal and informal approaches. The authors emphasize, identify, and apply fundamental principles that are applicable throughout the software lifecycle, in contrast to other texts which are based in the lifecycle model of software development. This emphasis enables students to respond to the rapid changes in technology that are common today.

Features

- NEW - Deeper analysis and explanation of object-oriented techniques.
- Teaches students about this established and widely adopted methodology.
- NEW - Use of Unified Modeling Language (UML).
- Encourages students to learn about graphical method of description that is widely used for requirements descriptions.
- NEW - Coverage of requirements analysis and software architecture.
- Teaches students about these two areas that have become better understood and more standard.
- NEW - Revised and updated case studies.
- Better demonstrate the principles discussed in the text.
- NEW - Model checking—A technique that provides automatic support to the human activity of software verification.
- Exposes students to this powerful new verification technique.

Contents

1. Software Engineering: A Preview.
   The Role of Software Engineering in System Design. A Shortened History of Software Engineering. The Role of the Software Engineer. The Software Life Cycle. The Relationship of Software Engineering to Other Areas of Computer Science. The Relationship of Software Engineering to Other Disciplines.
2. Software: Its Nature and Qualities.
   Classification of Software Qualities. Representative Qualities. Quality Requirements in Different Application Areas. Measurement of Quality.
3. Software Engineering Principles.
   Rigor and Formality. Separation of Concerns. Modularity. Abstraction. Anticipation of Change. Generality. Incrementality. Two Case Studies Illustrating Software Engineering Principles.
4. Software Design.
   The Software Design Activity and its Objectives. Modularization Techniques. Handling Anomalies. A Case Study in Design. Concurrent Software. Object-Oriented Design. Architecture and Components.
5. Software Specification.
   The Uses of Specifications. Specification Qualities. Classification of Specification Styles. Verification of Specifications. Operational Specifications. Descriptive Specifications. Building and Using Specifications in Practice.
6. Software Verification.
   Goals and Requirements of Verification. Approaches to Verification. Testing. Analysis. Symbolic Execution. Model Checking. Putting it All Together. Debugging. Verifying Other Software Properties.
7. The Software Production Process.
   What is a Software Process Model? Why Are Software Process Models Important? The Main Activities of Software Production. An Overview of Software Process Modes. Dealing with Legacy Software. Case Studies. Organizing the Process. Organizing Artifacts: Configuration Management. Software Standards.
8. Management of Software Engineering.
   Management Functions. Project Planning. Project Control. Organization. Risk Management. Capability Maturity Model.

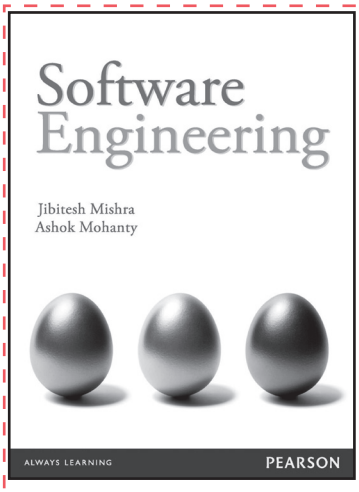
9. Software Engineering Tools and Environments. Historical Evolution of Tools and Environments. Dimensions for Comparing Software Tools. Representative Tools. Tool Integration. Forces Influencing the Evolution of Tools.
10. Epilogue. The Future. Ethics and Social Responsibility. Software Engineering Code of Ethics.

About the Authors

Carlo Ghezzi is a professor of computer science at the Politecnico di Milano, where he holds the chair of software engineering. He was named a Fellow of the Association for Computing Machinery in 2000 for his contributions to software engineering research.

Mehdi Jazayeri is a professor of computer science at the Technische Universität Wien, where he holds the chair of distributed systems. He spent many years in software development at several Silicon Valley companies, including 10 years at Hewlett-Packard Laboratories, Palo Alto, CA.

Dino Mandrioli is a professor of computer science at the Politecnico di Milano, where he holds the chair of theoretical computer science. His research interests are centered on the application of formal methods in the practice of software engineering.



Software Engineering

Jibitesh Mishra • Ashok Mohanty

ISBN: 9788131758694 | © Year: 2011 | Pages: 400

About the Book

Our new Indian original book on software engineering covers conventional as well as current methodologies of software development to explain core concepts, with a number of case studies and worked-out examples interspersed among the chapters. Current industry practices followed in development, such as computer aided software engineering, have also been included, as are important topics like 'Widget based GUI' and 'Windows Management System'. The book also has coverage on interdisciplinary topics in software engineering that will be useful for software professionals, such as 'quality management', 'project management', 'metrics' and 'quality standards'.

Features

- Covers both function oriented as well as object oriented (OO) approach.
- Emphasis on emerging areas such as 'Web engineering', 'software maintenance' and 'component based software engineering'.
- A number of line diagrams and examples.
- Case Studies on the ATM system and milk dispenser.
- Includes multiple-choice, objective-type questions and frequently asked questions with answers.

Contents

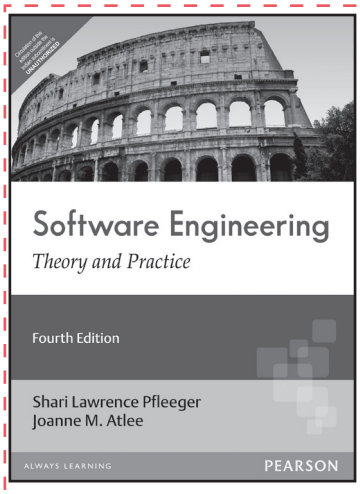
1. Introduction
2. Software Development Process
3. Software Requirement Engineering
4. Software Design Approaches
5. Structured Analysis
6. Structured Design
7. Object Oriented Concepts and Principles
8. Object Oriented Analysis
9. Object Oriented Design
10. User Interface Design
11. Coding and Documentation
12. Software Testing

13. Software Metrics
14. Software Project Estimation
15. Software Project Management
16. Software Quality Management
17. Web Engineering

Appendix A: Objective-type Questions
Appendix B: Frequently Asked Questions with Short Answers
Appendix C: Software Maintenance
Appendix D: Component based Software Engineering

About the Author

Dr Jibitesh Mishra is Associate Professor and Head, Department of Computer Science and Engineering, College of Engineering and Technology, Bhubaneswar, a constituent college of Biju Patnaik University of Technology, Orissa. He has more than 16 years of teaching experience in various universities throughout the world. He has authored four books of repu.



Software Engineering: Theory and Practice, 4/e

Shari Lawrence Pfleeger • Joanne M Atlee

ISBN: 9788131760628 | © Year: 2011 | Pages:784

About the Book

For introductory courses in Software Engineering. This introduction to software engineering and practice addresses both procedural and object-oriented development. The book applies concepts consistently to two common examples — a typical information system and a real-time system. It combines theory with real, practical applications by providing an abundance of case studies and examples from the current literature. This revision has been thoroughly updated to reflect significant changes in software engineering, including modeling and agile methods.

Features

- System Level — Chapter 5 has been significantly revised to focus just on architectural design.
- Component Level — Chapter 6 has been entirely rewritten to focus on design advice in the modeling and designing of software modules (e.g., components, objects). There is extensive coverage of general design principles, object-oriented design principles, and design patterns.
- Extensive coverage of object-oriented development, a programming perspective being implemented by many companies.
- Integrated treatment of concepts such as reuse, risk management, and quality engineering.
- Discussion of measurement issues as an integral part of software engineering strategy.
- Examination of legal and ethical issues in software engineering.
- The Companion Website http://wps.prenhall.com/esm_pfleeger_softengtp_4 provides additional materials to be used with the text. This site also links to additional resources, real world examples, and articles related to many topics in the book.

Contents

Preface
1. Why Software Engineering?
2. Modeling the Process and Life Cycle
3. Planning and Managing the Project
4. Capturing the Requirements
5. Designing the Architecture
6. Designing the Modules
7. Writing the Programs
8. Testing the Programs
9. Testing the System
10. Delivering the System
11. Maintaining the System
12. Evaluating Products, Processes, and Resources
13. Improving Predictions, Products, Processes, and Resources
14. The Future of Software Engineering

Annotated Bibliography

About the Authors

Shari Lawrence Pfleeger (Ph.D., Information Technology and Engineering, George Mason University; M.S., Planning, The Pennsylvania State University; M.A., Mathematics, The Pennsylvania State University; B.A., Mathematics with high honors, Harpur College, Binghamton, NY) is a senior researcher at RAND's Arlington, VA office where she helps organizations and government agencies understand whether and how information technology supports their mission and goals.

Joanne M. Atlee is an Associate Professor in the School of Computer Science at the University of Waterloo. Her research program focuses on software modeling, documentation, and analysis, with a particular emphasis on what she calls practical formalisms: specification and design notations that are practitioner-friendly but have a precise semantics suitable for automated analysis. More recently, she has been working on configurable model-driven development, whereby modeling notations, analysis tools, and code generators can be configured via semantics parameters.

Atlee was the founding Director of Waterloo's Software Engineering degree program. She served on the Steering Committee for the Computing Curricula Software Engineering volume, co-sponsored by IEEE-CS and ACM. She is the vice chair of the International Federation for Information Processing (IFIP) Working Group 2.9 on software requirements engineering. Atlee was the program-committee chair for the International Conference on Requirements Engineering in 2005 (RE'05), and will be co-chair of the program committee for the International Conference on Software Engineering in 2009 (ICSE'09).

Pearson

Software Engineering, 10/e

Ian Sommerville

New Edition

ISBN: TBA | © Year: 2017 | Pages: 808

About the Book

Software Engineering introduces students to the overwhelmingly important subject of software programming and development. In the past few years, computer systems have come to dominate not just our technological growth, but the foundations of our world's major industries. This text seeks to lay out the fundamental concepts of this huge and continually growing subject area in a clear and comprehensive manner.

The Tenth Edition contains new information that highlights various technological updates of recent years, providing students with highly relevant and current information. Sommerville's experience in system dependability and systems engineering guides the text through a traditional plan-based approach that incorporates some novel agile methods. The text strives to teach the innovators of tomorrow how to create software that will make our world a better, safer, and more advanced place to live.

Features

- The text covers the latest key developments in software engineering.
- The core structure of the text has been significantly altered to include relevant information on agile methods.
- The text applies the topic of software engineering to real world scenarios.
- Supplementary information supports key concepts.

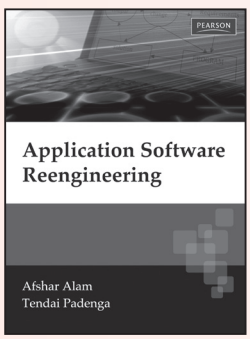
Contents

17. Distributed Software Engineering
18. Service-oriented Software Engineering
19. Systems engineering
20. Systems of systems
21. Real-time software engineering
22. Project management
23. Project planning
24. Quality management
25. Configuration management

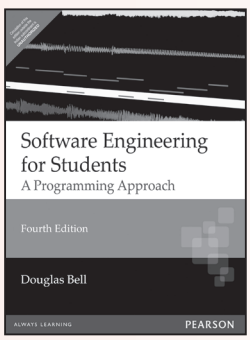
About the Author

Ian Sommerville, University of St Andrews, Scotland.

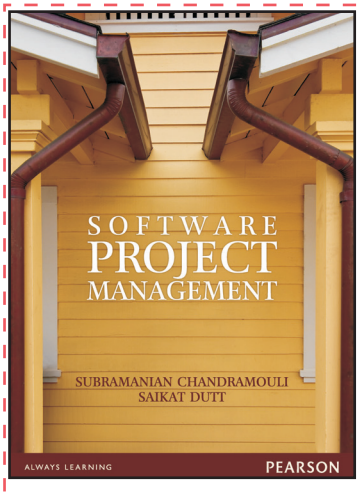
Also Available



ISBN: 9788131731857
Pages: 239



ISBN: 9788131716052
Pages: 448



Software Project Management

Subramanian Chandramouli • Saikat Dutt

NEW

ISBN: 9789332542143 | © Year: 2015 | Pages: 520

About the Book

Software Project Management is a comprehensive textbook designed for the students of Computer Science and Information Technology. All the topics are explained with a large number of practical examples and case studies.

Features

- Practical approach used to explain the subject.
- Based on the widely accepted Project Management Body of Knowledge (PMBOK®) guidelines.
- Exclusive chapter on Agile Methodology.
- Case studies discussed online.

Contents

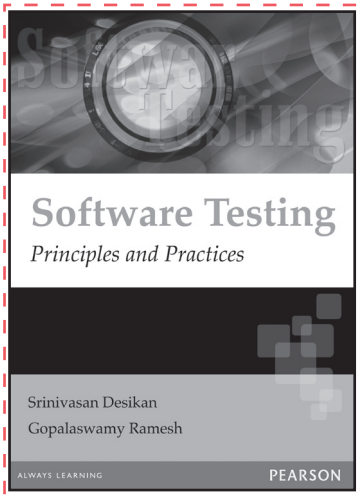
About the Authors

S.Chandramouli PMP, PMI ACP is an alumnus of the Indian Institute of Management, Kozhikode (IIM-K), and a prolific writer of business management articles dealing with delivery management, competitiveness, IT, organizational culture and leadership. He was an active member in PMI OPM3 and PMCDF project works. He is a certified "Green Belt" in six sigma methodology and is also ITIL (F) Certified. He is actively associated with academia & various research professional bodies in India.

Saikat Dutt is 'Project Management Professional (PMP)' and 'PMI Agile Certified Professional' certified by Project Management Institute (PMI) USA and a Certified Scrum Master (CSM). Saikat has more than Seventeen years of IT industry experience and has expertise in managing large scale multi-location and mission critical projects.

Also Available

ISBN: 9788131717929
Pages: 440



Software Testing: Principles and Practices

Srinivasan Desikan • Gopalaswamy Ramesh

ISBN: 9788177581218 | © Year: 2005 | Pages: 480

About the Book

Software Testing: Principles and Practices is a comprehensive treatise on software testing. It provides a pragmatic view of testing, addressing emerging areas like extreme testing and ad hoc testing.

Features

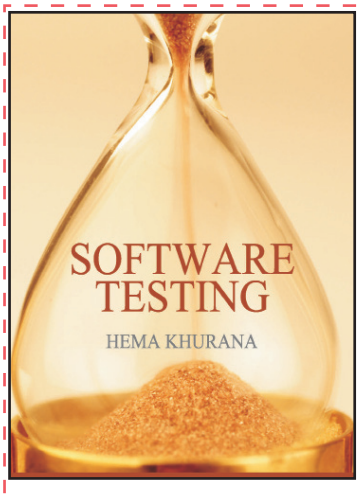
- Focuses on geographically distributed teams. Software Testing addresses people, orgizational structures and models for global teams.
- Showcases India's rich experience in testing. An increase amount of product testing is being done in India. However, not many books examine this experience or the India Business Model. This book showcases the best of these practices.
- Emphasizes pratical experience while retaining comprehensive theoretical rigor. This book addresses pratical aspects of testing like internationalization and regression testing while preserving traditional approaches like equivalence pratitioning and cyclomatic complexity.

Contents

About the Authors

Srinivasan Desikan is Senior Systems Architect at HP, System Technology and Software Division (STSD), Bangalore, India, and has worked as Director of Quality Assurance and Testing at Talisma, Siebel and Agile Software. He has contributed to several technical and management positions at Novell Inc, Wipro Infotech, and C-DOT and was part of large testing and product development teams. He has been in the field of testing since 1989 and some of those products enjoyed several million customers worldwide. He is well known to the testing community around the world and has vast experience in test automation, test management, test processes, test lab maintainance and in setting up test teams from scratch. He presented papers on testing in the international testing conferences such as QAI-India, ASIASTAR-2002 (Melbourne), PSQT/PSTT-2003 (Washington), SPIN (Chennai) and STeP-IN (Bangalore). A post gradute in computer applications from Pondicherry Engineering College, the author is currently the convener of the quality forum at the Bangalore Chamber of Industries and Commerce (BCIC). He is serving as adjunct professor at several colleges/universities/institutes to promote Software Testing as a subject.

Gopalaswamy Ramesh is an independent consultant and an adjunct professor at Loyola Institute of Business Management, SSN School of Management and Computer Applications, Great Lakes Institute of Management in Chennai and International Institute of Information Technology, Bangalore. He has over 25 years of industry experience in India and abroad, and has held various technical and management positions. He started his career with Tata Burroughs Limited (now Tata Infotech), working in UK and then moved to Far East Computers, Singapore, heading pre-sales and post-sales operations for Oracle products in the ASEAN region in the early 1980s. While at Singapore, he was instrumental in launching Oracle in ASEAN countries, including China, before moving over to Oracle's headquarters in California. In India, he played a key role in starting Oracle's India Development Center (IDC) from scratch, and has contributed to its growth and development. He is the author of the best-selling, national-award-winning ,Managing Global Software Projects,which was translated into Chinese. He is the co-author of Software Maintainence and is currently co-authoring books on soft skills and software quality. He has delivered lectures in several international forums and institutions, and currently consults on project management and related areas to several companies, in India and abroad.



Software Testing

Hema Khurana

NEW

ISBN: 9789332543652 | © Year: 2015 | Pages: 422

About the Book

This book dispels such myths with a systematic approach starting from definitions, static testing and reviews, dynamic testing(Orthogonal Array Technique and MC/DC Coverage included), testing throughout the lifecycle and management of testing projects illustrated with numerous examples, multiple choice questions and exercises.

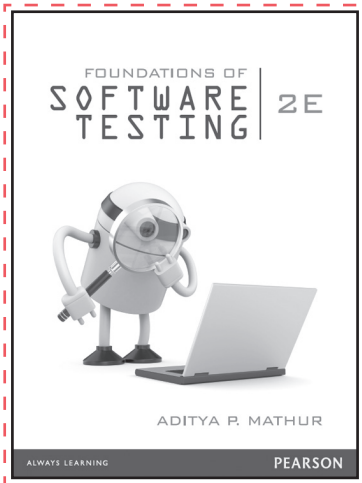
Features

- Covers a chapter on Standards relevant to software testing (Software lifecycle Standard ISO12207, Software testing Standard ISO29119 and other product standards relating to safety and usability).
- Describes 4 case studies on the application of Standards and methods to non- functional testing such as usability, reliability and safety besides a case study on bench marking software products based on their quality characteristics.
- It covers Dynamic Testing in detail with relevant examples.
- A chapter on Test Management new concepts like Use case based test effort estimation, People issues in software testing an Test laboratory accreditation
- Includes around 150 exercises(Objectives and real time exercises).

Contents

About the Author

Dr. Hema Khurana was Head of Bangalore, Centre of Electronics Testing and Development Centre under the Department of Electronics and Information Technology, Government of India.



Foundations of Software Testing, 2/e

Aditya P. Mathur

ISBN: 9788131794760 | © Year: 2013 | Pages: 728

About the Book

The Second Edition of Foundations of Software Testing is aimed at the undergraduate, the graduate students and the practicing engineers.

It presents sound engineering approaches for test generation, ion, minimization, assessment, and enhancement. Using numerous examples, it offers a lucid description of a wide range of simple to complex techniques for a variety of testing-related tasks. It also discusses the comparative analyses of commercially available testing tools to facilitate the tool ion.

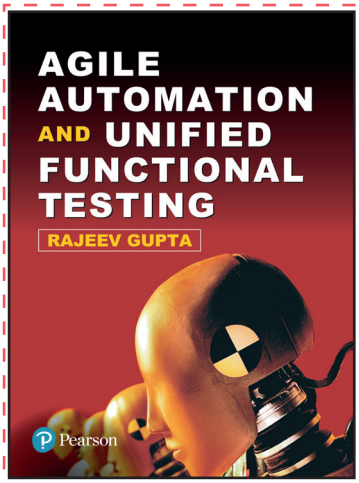
Features

- Mathematical and algorithmic approach followed to de scribe a wide range of simple to complex techniques for test generation.
- Detailed treatment of topics such as test generation from finite state models, combinatorial designs and test selection and minimization for regression testing.
- Test adequacy assessment using criteria mandated by the FAA and other agencies; data-flow based adequacy and mutation-based adequacy which are the most powerful of the available test adequacy criteria.
- Step-by-step algorithms to generate tests.
- Comparative analyses of commercially available testing tools to facilitate tool selection.

Contents

About the Author

Aditya Mathur is a Professor of Computer Science at Purdue University, West Lafayette, Indiana, USA and also the Head of Pillar Information Systems Technology and Design at the Singapore University of Technology and Design. He is a founding member of the Department of Computer Science at the Birla Institute of Technology and Science, Pilani. He has taught courses in Computer Sciences at all levels since 1972. His book titled Introduction to Microprocessors was the first text of its kind in India published in 1980. This book continues to a favorite of thousands of students. Aditya is a prolific researcher and has published extensively in quality international journals and conferences in the area of software engineering.



Agile Automation & Unified Functional Testing, 1e

Rajeev Gupta

New Edition

ISBN: 9789332573659 | © Year: 2017 | Pages: 928

About the Book

Agile Automation and Unified Functional Testing is a one-stop resource that explains all concepts, features and benefits of agile automation and UFT with real-time examples and their solutions.

This book starts with test automation basics and subsequently moves to its advanced concepts such as test automation life cycle, test automation approach, and framework design. It has been designed to be a beginner's guide for new users, a companion guide for experienced users, and a reference guide for professionals preparing for interviews or certification examinations on test automation and UFT.

Features

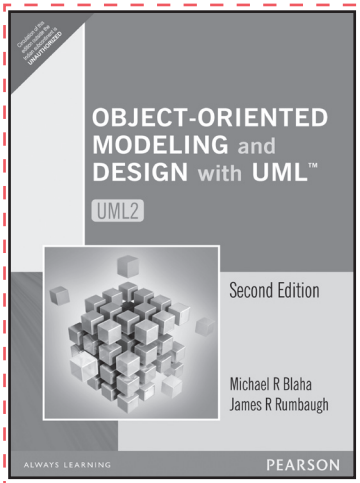
- Describes how to start, execute, maintain and manage a test automation project in detail
- Describes the test automation life cycleâ€"need analysis, ROI analysis, tool analysis, framework design, script development and maintenanceâ€"in detail
- Detailed coverage of advanced topics such as smart object identification, object repository design, regular expressions, descriptive programming, recovery scenarios and automation object model
- Contains various templates specifically for meeting client requirements

About the Authors

1. Introduction
2. Software processes
3. Agile software development
4. Requirements engineering
5. System modeling
6. Architectural design
7. Design and Implementation
8. Software testing
9. Software Evolution
10. Dependable Systems
11. Reliability engineering
12. Safety Engineering
13. Security Engineering
14. Resilience Engineering
15. Software Reuse
16. Component-based Software Engineering
17. Distributed Software Engineering
18. Service-oriented Software Engineering
19. Systems engineering
20. Systems of systems
21. Real-time software engineering
22. Project management
23. Project planning
24. Quality management
25. Configuration management

About the Authors

Ian Sommerville, University of St Andrews, Scotland



Object-Oriented Modeling and Design With UML, 2/e

Michael Blaha • James Rumbaugh

ISBN: 9788131711064 | © Year: 2007 | Pages: 504

About the Book

This revision offers a crisp, clear explanation of the basics of object-oriented thinking via UML models, then presents a process for applying these principles to software development, including C++, Java, and relational databases. An integrated case study threads throughout the book, illustrating key ideas as well as their application.

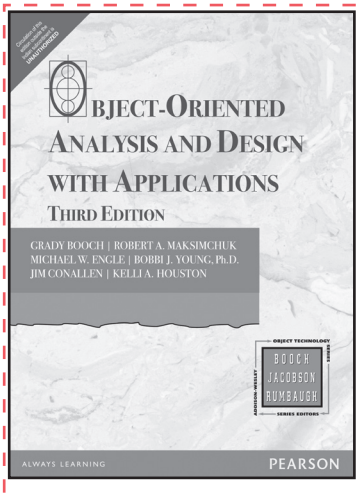
Features

- Compliant with Unified Modeling Language 2.
- Substantially updated content.
- More robust process.
- Extensive exercises with solution.
- Instructor's on-line solutions manual.

Contents

About the Authors

Rumbaugh and **Michael Blaha** are two of the "founding fathers" of UML. They invented UML, the basis for UML, along with Booch notation. Their first edition was crucial to the development and adoption of Object-Oriented methods when they were in their infancy. Blaha is a worldwide consultant and is a partner with Modelsoft Consulting, and SentientPoint Corporation. He is active in the IEEE Computer Society. Rumbaugh is a Distinguished Engineer with the Rational brand of IBM and is one of the original co-designers of UML. He is a highly influential author.



Object-Oriented Analysis and Design with Applications, 3/e

Grady Booch • Jim Conallen • Michael W. Engel
Kelli A. Houston • Robert A. Maksimchuk • Bobbi J. Young

ISBN: 9788131722879 | © Year: 2009 | Pages: 724

About the Book

Object-Oriented Analysis and Design with Applications has long been the essential reference to object-oriented technology—a technology that has evolved and become the de facto paradigm in mainstream software development. With this highly anticipated third edition, readers can learn to apply object-oriented methods using the Unified Modeling Language (UML) 2.0. The authors including UML founder Grady Booch draw upon their rich and varied experience to offer improved methods for object development that tackle the complex problems faced by system and software developers. Using numerous examples, they illustrate essential concepts, explain the method, and show successful applications in a variety of fields, including systems architecture, data acquisition, cryptoanalysis, control systems, and Web development. Readers will also find pragmatic advice on a host of important issues, including classification, implementation strategies, and cost-effective project management.

Features

- An extensive introduction to UML 2.0 from the notation's most fundamental and advanced elements, with an emphasis on key changes.
- A greatly enhanced focus on modeling—eagerly requested by readers—with five chapters that each emphasize a particular phase in the overall development lifecycle.
- Fresh approaches to reasoning about complex systems, including a new treatment of system architecture using OOAD and UML.
- An examination of the conceptual foundation of the widely misunderstood fundamental elements of the object model such as abstraction, encapsulation, modularity, and hierarchy.
- Advice on how to allocate the resources of a team of developers and manage the risks associated with developing complex software systems.
- An appendix on key object-oriented programming languages such as Java and C++.

About the Authors

Grady Booch is an IBM fellow and author of six best-selling books on object-oriented programming. He is world-renowned as an originator of OO and the founder of UML.

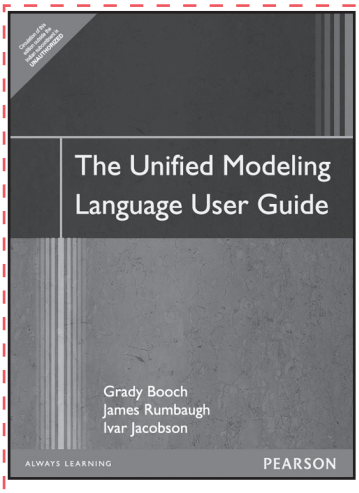
Robert A. Maksimchuk is a Director of Research in the Unisys Chief Technology Office, focusing on emerging modeling technologies. He is coauthor of the books UML for Database Design and UML of Mere Mortals.

Michael W. Engle is a principal member of the engineering staff with the Lockheed Martin Corporation. He has extensive technical and management experience across the complete system development lifecycle, from project initiation through deployment and support, in a variety of application domains.

Bobbi J. Young is a Director of Research for the Unisys Chief Technology Office. She has many years of experience in the IT Industry, working with commercial companies and Department of Defense contractors.

Jim Conallen is a software engineer in IBM Rational's Model Driven Development Strategy team, where he is actively involved in applying the Object Management Group's (OMG) Model Driven Architecture (MDA) initiative to IBM Rational's model tooling.

Kelli A. Houston is a consulting IT Specialist at IBM Rational. She is the method architect for IBM's internal method and is part of the team responsible for integrating IBM's methods.



The Unified Modeling Language User Guide

Grady Booch • Ivar Jacobson • James Rumbaugh

ISBN: 9788177583724 | © Year: 2002 | Pages: 512

About the Book

Introduced in 1997, the **Unified Modeling Language (UML)** has been rapidly accepted throughout the software industry as the standard graphical language for specifying, constructing, visualizing, and documenting software-intensive systems.

Features

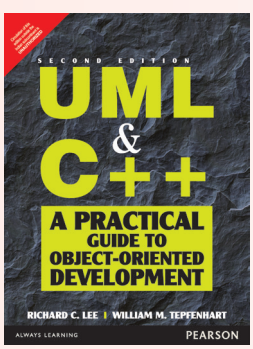
- Understand what the UML is, what it is not, and why it is relevant to the development of software-intensive systems.
- Master the vocabulary, rules, and idioms of the UML in order to "speak" the language effectively.
- Learn how to apply the UML to a number of common modeling problems.
- See illustrations of the UML's use interspersed with use cases for specific UML features.
- Gain insight into the UML from the original designers of the UML.

Contents

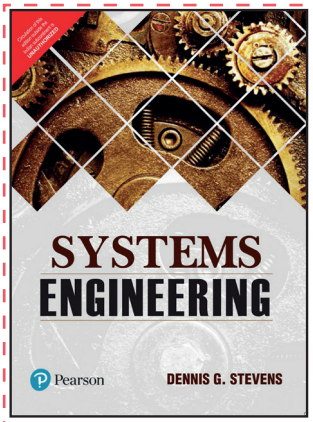
About the Authors

Grady Booch, **James Rumbaugh**, and **Ivar Jacobson** are the original designers of the Unified Modeling Language and three of the most widely known names in the field of software engineering.

Also Available



ISBN: 9789332551930
Pages: 557



System Engineering, 1/e

Richard Stevens | Peter Brook | Ken Jackson | Stuart Arnold

NEW

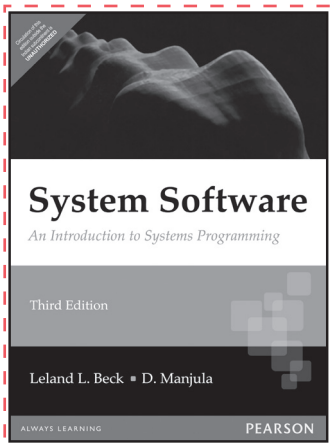
ISBN: 9789332552616 | © Year: 2017 | Pages: 392

About the Book

In an age of shrinking development cycles, it is harder than ever to bring the right product to market at the right time. Good product, especially complex products, is underpinned by good systems, and systems engineering itself is recognised as the key tool to product development. This book covers the principles of systems design in an easy to read format.

The authors have decades of practical industrial experience, and the material is ideal for industrial project teams. For academic courses, the book acts as a component for graduate and undergraduate engineering studies, particularly those on systems engineering. It covers how to handle requirements, architectural design, integration and verification, starting from the perspective of a simple linear lifecycle. The book then gradually introduces recent work on the complexity of real world systems, with issues such as multi-level systems, and iterative development. There is also coverage of the impact of systems engineering at the organsational level."

Contents



System Software: An Introduction to Systems Programming, 3/e

Leland L. Beck • D. Manjula

ISBN: 9788177585551 | © Year: 2002 | Pages: 512

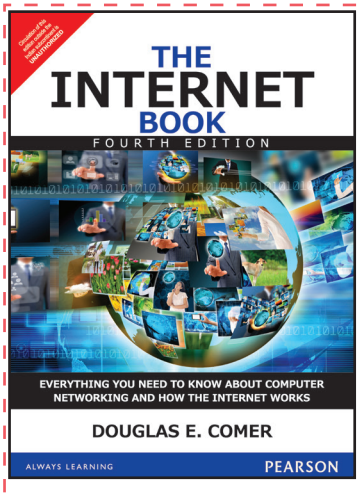
About the Book

In this third edition of his classic title, Leland Beck provides a complete introduction to the design and implementation of various types of system software. A core text for undergraduate/graduate software students, it stresses on the relationship between system software and the architecture of the machine it is designed to support, presenting the fundamental concepts of each type of software lucidly.

Features

- Updated architecture & Software examples, including the Intel x86 family, IBM PowerPC, Sun SPARC, CRAY T3E.
- Introduction to object-oriented programming & design.
- New material on finite automata & shift-reduce parsing.
- Exercises at the end of each chapter.

Contents



The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works, 4/e

Douglas E. Comer

ISBN: 9789332549784 | © Year: 2015 | Pages: 416

About the Book

Fully revised and updated throughout, this text explains – in non-technical language – the technology of how computers communicate, what the Internet is, how the Internet works, and what the Internet can do for people. Students connect to the material through Comer's solid overview that focuses on the "big picture," rather than the minute details. No background in computer networking or the Internet is assumed.

Features

- Written by a leading computer networking teacher, researcher and former member of the Internet Architecture Board.
- An abundance of analogies and everyday examples used to explain difficult concepts.
- Flexible organization in four fairly independent sections.

Part I. Begins with fundamental concepts such as digital and analog communication. It also introduces packet switching and explains the Local Area Network technologies that are used in most businesses.

Part II. Gives a short history of the Internet research project and the development of the Internet.

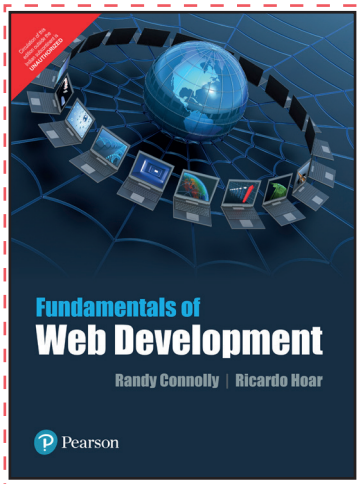
Part III. Explains how the Internet works, including a description of the two fundamental protocols used by all services: the Internet Protocol (IP) and the Transmission Control Protocol (TCP).

Part IV. Examines services available on the Internet. In addition to covering browsers, web documents, and search engines used with the World Wide Web, chapters discuss email, bulletin boards, file transfer, remote desktops, wikis, blogs, and audio and video communication. In each case, the text explains how the service operates and how it uses facilities in the underlying system.

Contents

About the Author

Douglas E. Comer is a professor at Purdue University, where he teaches popular computer networking courses. He consults for industry and teaches hundreds of professionals and diverse audiences around the world about the Internet at professional conferences and in onsite presentations. His series of books on networking and TCP/IP protocols receives high acclaim; his books are popular worldwide. One of the researchers who contributed to the formation of the Internet in the late 1970s and 1980s, he has served on the Internet Architecture Board, and is a Fellow of the ACM.



Fundamentals of Web Development, 1/e

Randy Connolly • Ricardo Hoar

NEW

ISBN: 9789332575271 | © Year: 2016 | Pages: 1024

About the Book

Fundamentals of Web Development covers the broad range of topics required for modern web development (both client- and server-side) and is appropriate for students who have taken a CS1 course sequence.

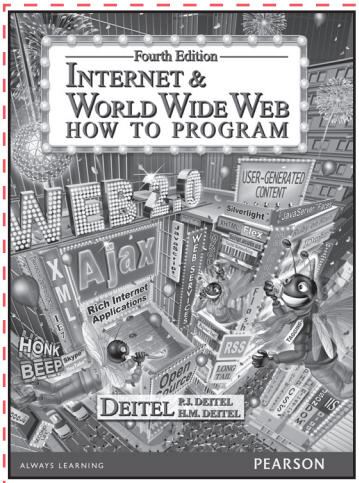
The book guides students through the creation of enterprise-quality websites using current development frameworks, its comprehensive coverage of a modern internet development platform includes HTML5, CSS3, Javascript, and the LAMP stack (that is, Linux, Apache, MySQL, and PHP). Other important technologies covered include jQuery, XML, WordPress, Bootstrap, and a variety of third-party APIs that include Facebook, Twitter, and Google and Bing Maps. Coverage also includes the required ACM web development topics in a modern manner closely aligned with best practices in the real world of web development.

Teaching and Learning Experience Help students master the fundamentals of web development: A true grasp of web development requires an understanding of both the foundations of the web and current web development practices. Support learning outcomes in various teaching scenario: This book allows instructors to chart their own unique way through the topics that make up contemporary web development."

Features

- Covers both the concepts and the practice of the entire scope of web development. Web development can be a difficult subject to teach because it involves covering a wide range of theoretical material that is technology independent as well as practical material that is very specific to a particular technology. This book comprehensively covers both the conceptual and practical side of the entire gamut of the web development world.
- Focused on the web development reality of today's world and in anticipation of future trends. The world of web development has changed remarkably in the past decade. For instance, fewer sites are being created from scratch; instead, a great deal of current web development makes use of existing sophisticated frameworks and environments such as jQuery, WordPress, HTML5, and Facebook. It is important to integrate this new world of web development into any web development textbook.

Contents



Internet & World Wide Web: How to Program, 4/e

Harvey M. Deitel • Paul J. Deitel

ISBN: 9788131725221 | © Year: 2009 | Pages: 1424

About the Book

Internet and World Wide Web How to Program, 5e introduces students with little or no programming experience to the exciting world of Web-Based applications. The book has been substantially revised to reflect today's Web 2.0 rich Internet application-development methodologies. A comprehensive book that teaches the fundamentals needed to program on the Internet, this text provides in-depth coverage of introductory programming principles, various markup languages (XHTML, Dynamic HTML and XML), several scripting languages (JavaScript, PHP, Ruby/Ruby on Rails and Perl); AJAX, web services, Web Servers (IIS and Apache) and relational databases (MySQL/Apache Derby/Java DB)—all the skills and tools needed to create dynamic Web-based applications.

Features

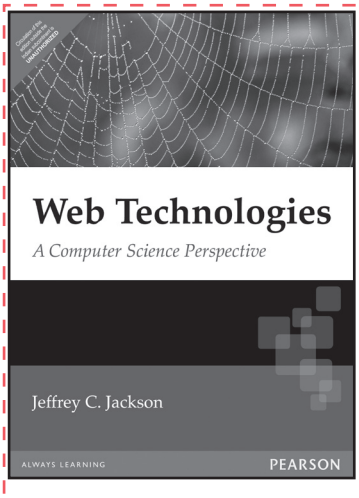
- Language features are presented in the context of complete working programs.
- Features thousands of lines of code in hundreds of complete working programs.
- Enables students to confirm that programs run as expected.
- Icons throughout identify hundreds of Software Engineering Observations; Good Programming Practices; Common Programming Errors; Portability Tips; Performance Tips, Testing and Debugging Tips, and Look-and-Feel Observations.
- Provides hundreds of valuable programming tips and facilitates learning.
- Extensive set of interesting exercises and substantial projects that enables students to apply what they've learned in each chapter.

Contents

About the Author

Dr. Harvey Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has over 50 years of experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees in Electrical Engineering from MIT and a Ph.D. in Mathematics from Boston University–he studied computing in each of these programs before they spun off Computer Science programs.

Paul Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., has over 30 years of experience in computing. He is a graduate of MIT, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer designations and is an Oracle Java Champion. He and his co-author, Dr. Harvey Deitel, are the world's best-selling programming-language textbook/professional book/video authors.



Web Technologies: A Computer Science Perspective

Jeffrey C. Jackson

ISBN: 9788131717158 | © Year: 2007 | Pages: 592

About the Book

This text introduces the key technologies that have been developed as part of the birth and maturation of the World Wide Web. It provides a consistent, in-depth treatment of technologies that are unlikely to receive detailed coverage in non-Web computer science courses. Students will find an ongoing case study that integrates a wide spectrum of Web technologies, guidance on setting up their own software environments, and a variety of exercises and project assignments.

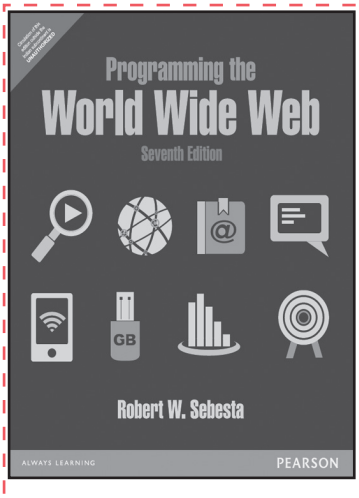
Features

- Standards-first approach in both text and exercises - Encourages students tdevelop standards-compliant software.
- Java-based representatives - Chosen tdetail Web capabilities that can be provided by several competing technologies, enabling students tfocus on the concepts rather than on learning new languages.
- All software used in examples and needed for exercises and projects is available via free download for multiple platforms - Enables students trun examples and develop assignments on their own machines rather than in a lab.
- Web Services coverage includes several technologies such as SOAP, WSDL, and Java-based development tools that are likely tincrease in importance in coming years.
- Multiple types of exercises in each chapter - Includes exercises, research/exploration problems, and projects.
- Numerous examples illustrate nearly every concept covered - Examples are often small, illustrating a single concept, with larger examples provided as needed tdemonstrate how concepts can be integrated and/or tprovide motivation.

Contents

About the Author

Jeffery C. Jackson began his computing career as a software engineer in 1978. After a number of years in industry and a brief stint teaching undergraduate computer science, he entered the graduate computer science program at Carnegie Mellon, earning his Ph.D. in 1995. Subsequently, he joined the faculty at Duquesne University, where he is now a professor of computer science. From 1996 through 2000, in addition to his affiliation with Duquesne, Jeff worked for a dot-com in various positions, including Director of Research. He also has a number of journal publications to his credit and is currently a director of the Association for Computational Learning.



Programming the World Wide Web, 7/e

Robert W. Sebesta

ISBN: 9789332518827 | © Year: 2013 | Pages: 688

About the Book

Programming the World Wide Web provides a comprehensive introduction to the tools and skills required for both client- and server-side programming, teaching students how to develop platform-independent sites using the most current Web development technology. Essential programming exercises are presented using a manageable progression: students begin with a foundational XHTML Web site and employ new languages and technologies to add features as they are discussed in the course. Readers with previous experience programming with an object-oriented language are guided through concepts relating to client-side and server-side programming.

Features

- Client-side and server-side technologies are covered in two distinct sections, client-side in Chapters 2-7 and server-side in Chapters 8-16.
- Client-side technology is covered using HTML, XHTML, CSS, JavaScript, Java applets, and XML.
- Server-side technology is covered using Flash, Faces, Java servlets, and JSP, PHP, ASP.NET, Ruby, Ruby on Rails, Rails 2.0, and Ajax.
- JavaScript is introduced in Chapter 4 using students' knowledge of other programming languages to leverage the discussion.
- Building XHTML documents is presented in Chapter 5.
- Chapter 8 on Flash Programming includes examples of drawing graphics figures, animation using both motion and shape tweening, and adding a sound track on a movie.
- Chapter 10 on Ajax contains sections on return document forms, Ajax toolkits, and Ajax security.
- Chapter 11 on Java Web Programming includes sections on NetBeans, JavaBeans, and JavaServer Faces.
- Chapter 12 is a complete introduction to ASP.NET, beginning with a brief introduction to C# and continuing with discussions of ASP.NET controls and Web service construction with ASP.NET. It includes a section on ASP.NET Ajax and a brief introduction to Visual Studio 8.
- Chapter 13 covers Web access to relational databases, including SQL and MySQL, and Web access to databases using Perl, PHP, and Java JDBC.
- A brief, accessible Introduction to Java Appendix is included for C++ programmers, including coverage of Java applets, servlets, JSP, and JDBC.
- World Wide Web Consortium (W3C) Validation Program: All of the markup documents in the book are valid on the W3C validation program.

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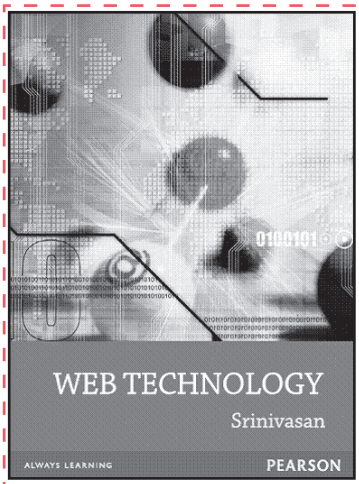


Web Technology

Srinivasan M

ISBN: 9788131774199 | © Year: 2012 | Pages: 392

About the Book

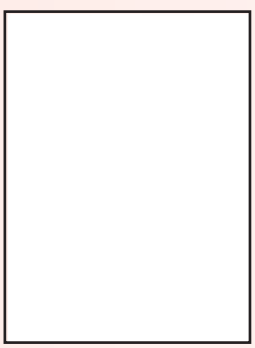
This book introduces the keyset technologies that are currently used to create applications on web. It explains the principal HTML concept, the client-side used JavaScript and the server-side used JSP with relevant coding examples. Emphasis is given on XML with examples including XML Transformations (XSTL). Apart from this, the book also dwells into the alternatives to XML such as the JSON.

Features

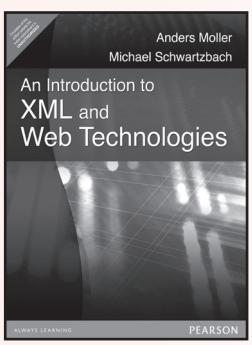
- Ajax, Web services, Java basics and Java EE are covered in detail, with codes.
- Technologies such as HTML, CSS, JavaScript, Java, Java Servlets, and Web/App servers are discussed.
- Includes real-time case studies.
- 150 examples and 260 exercises.

Contents

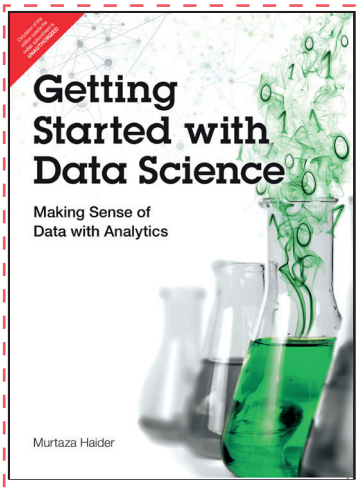
Also Available



ISBN: 9788131716854
Pages: 988



ISBN: 9788131726075
Pages: 568



Getting Started with Data Science: Making Sense of Data with Analytics, 1/e

NEW

Murtaza Haider

ISBN: 9789332570252 | © Year: 2016 | Pages: 608

About the Book

Getting Started with Data Science takes its approach from worldwide best-sellers like Freakonomics and the books of Malcolm Gladwell: it teaches through a powerful narrative packed with unforgettable stories. The book covers basic theory and technique, backed with plenty of clear, jargon-free examples and practice opportunities. Everything's software and platform independent, so students can learn what they need whether they work with R, Stata, SPSS, SAS, or another toolset.

Features

- Teaches data analytics with the same popular approach that made Freakonomics and Malcolm Gladwell's books worldwide best-sellers.
- Covers crucial ingredients for practical success with data analytics -- especially how to create powerful, visual narratives to explain findings and make them actionable.
- Practical, hands-on, and product independent: supports any tool, application, or environment.
- Gives students extensive practice -- not just a single example for each concept.
- By an expert who has crafted 50+ of the world's most popular data analytics instructional videos.

Contents

About the Author

Murtaza Haider, Ph.D., is an Associate Professor at the Ted Rogers School of Management, Ryerson University, and the Director of a consulting firm Regionomics Inc. He is also a visiting research fellow at the Munk School of Global Affairs at the University of Toronto (2014-15). In addition, he is a senior research affiliate with the Canadian Network for Research on Terrorism, Security, and Society, and an adjunct professor of engineering at McGill University.

Big Data Fundamentals, 1/e

NEW

Thomas Erl

ISBN: 9789332575073 | © Year: 2016 | Pages: 240

About the Book

Big Data Science Fundamentals offers a comprehensive, easy-to-understand, and up-to-date understanding of Big Data for all business professionals and technologists. Leading enterprise technology author Thomas Erl introduces key Big Data concepts, theory, terminology, technologies, key analysis/analytics techniques, and more - all logically organized, presented in plain English, and supported by easy-to-understand diagrams and case study examples.

Features

- Presents vendor-neutral coverage of concepts, theory, terminology, technologies, key analysis/analytics techniques, and more.
- Illuminates fundamental and advanced principles with hundreds of images, diagrams, and real case studies.
- Clarifies the linkages between Big Data and existing enterprise technologies, analytics capabilities, and business intelligence systems.
- Clear, consistent, logically organized, and up-to-date.
- The newest title in The Prentice Hall Service Technology Series from Thomas Erl.

Contents

About the Author

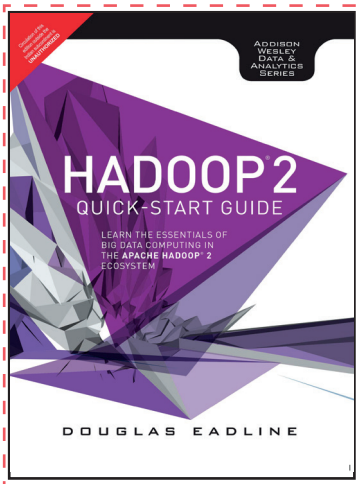
Thomas Erl is a top-selling IT author, founder of Arcitura Education and series editor of the Prentice Hall Service Technology Series from Thomas Erl. With more than 200,000 copies in print worldwide, his books have become international bestsellers and have been formally endorsed by senior members of major IT organizations, such as IBM, Microsoft, Oracle, Intel, Accenture, IEEE, HL7, MITRE, SAP, CISCO, HP and many others. As CEO of Arcitura Education Inc., Thomas has led the development of curricula for the internationally recognized Big Data Science Certified Professional (BDSCP), Cloud Certified Professional (CCP) and SOA Certified Professional (SOACP) accreditation programs, which have established a series of formal, vendor-neutral industry certifications obtained by thousands of IT professionals around the world. Thomas has toured more than 20 countries as a speaker and instructor. More than 100 articles and interviews by Thomas have been published in numerous publications, including The Wall Street Journal and CIO Magazine.

Wajid Khattak is a Big Data researcher and trainer at Arcitura Education Inc. His areas of interest include Big Data engineering and architecture, data science, machine learning, analytics and SOA. He has extensive .NET software development experience in the domains of business intelligence reporting solutions and GIS.

Wajid completed his MSc in Software Engineering and Security with distinction from Birmingham City University in 2008. Prior to that, in 2003, he earned his BSc (Hons) degree in Software Engineering from Birmingham City University with first-class recognition. He holds MCAD & MCTS (Microsoft), SOA Architect, Big Data Scientist, Big Data Engineer and Big Data Consultant (Arcitura) certifications.

Dr. Paul Buhler is a seasoned professional who has worked in commercial, government and academic environments. He is a respected researcher, practitioner and educator of service-oriented computing concepts, technologies and implementation methodologies. His work in XaaS naturally extends to cloud, Big Data and IoE areas. Dr. Buhler's more recent work has been focused on closing the gap between business strategy and process execution by leveraging responsive design principles and goal-based execution.

As Chief Scientist at Modus21, Dr. Buhler is responsible for aligning corporate strategy with emerging trends in business architecture and process execution frameworks. He also holds an Affiliate Professorship at the College of Charleston, where he teaches both graduate and undergraduate computer science courses. Dr. Buhler earned his Ph.D. in Computer Engineering at the University of South Carolina. He also holds an MS degree in Computer Science from Johns Hopkins University and a BS in Computer Science from The Citadel.



Hadoop 2 Quick-Start Guide: Learn the Essentials of Big Data Computing in the Apache Hadoop 2 Ecosystem, 1/e

Douglas Eadline

NEW

ISBN: 9789332570351 | © Year: 2016 | Pages: 304

About the Book

An easy, accessible guide to Big Data technology, this book covers all the basics students need to know to install and use Hadoop 2 on both personal computers and servers, and navigate the entire Apache Hadoop ecosystem. Hadoop 2 is demystified This guide explains the problems Hadoop solves, shows how it relates to Big Data, and demonstrates both administrators and users work with it. From its Getting Started checklist/flowchart to its roadmap of additional resources, Hadoop 2 Quick-Start Guide is the perfect Hadoop 2 starting point for students to master Big Data.

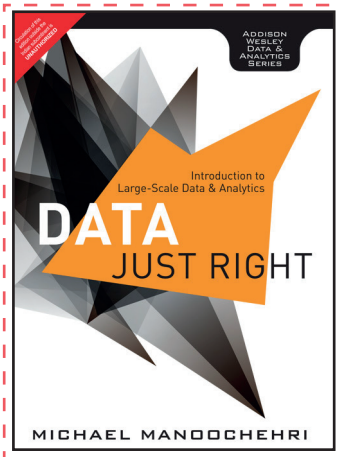
Features

- Helps students get Hadoop up and running fast with clear, well-tested beginner-level instructions and examples.
- Includes hands-on coverage: HDFS, running programs, benchmarking, MapReduce, higher-level tools, YARN, administration, and more Demystifies Hadoop 2.

Contents

About the Author

Douglas Eadline began his career as a practitioner and a chronicler of the Linux cluster HPC revolution and now documents Big Data analytics. Starting with the first Beowulf Cluster how-to document, Doug has written hundreds of articles, white papers, and instructional documents covering virtually all aspects of High Performance Computing (HPC). Prior to starting and editing the popular ClusterMonkey.net website in 2005, he served as editor-in-chief for ClusterWorld Magazine, and was senior HPC editor for Linux Magazine. Currently, he is a writer and consultant to the HPC/Data Analytics industry and leader of the Limulus Personal Cluster Project (limulus.basement-supercomputing.com). He authored Hadoop Fundamentals LiveLessons, Second Edition (2015), and Apache Hadoop YARN LiveLessons (2014), and is coauthor of Apache Hadoop™ YARN (2014), all from Addison-Wesley.



Data Just Right: Introduction to Large-Scale Data & Analytics, 1/e

Michael Manoochehri

ISBN: 9789332539259 | © Year: 2014 | Pages: 248

About the Book

Data Just Right a book utterly invaluable to every Big Data decision-maker, implementer, and strategist. Google's Michael Manoochehri organizes this book around today's key Big Data use cases, showing how they can be best addressed by combining technologies in hybrid solutions. Drawing on his own extensive experience, Manoochehri presents the technical detail needed to implement each solution, and best practices the reader can apply to any Big Data project.

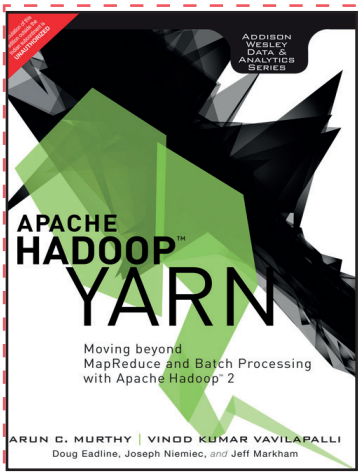
Features

- The practical, realistic guide to making Big Data work: real use cases, up-to-date examples, actual code, detailed solutions.
- Not another Big Data polemic: all the details tech-savvy readers need to build high-value solutions.
- Cutting-edge approaches to managing massive datasets, visualizing data, building data pipelines and dashboards, and working with real-time data.
- Techniques using Hadoop, Hive, Pig, Tableau, Google Bigquery, and other pioneering tools.
- By Michael Manoochehri, Big Data expert at Google.

Contents

About the Author

Michael Manoochehri is an entrepreneur, writer, and optimist. With many years of experience working with enterprise, research, and non-profit organizations, his goal is to help make scalable data analytics more affordable and accessible. Michael has been a member of Google's Cloud Platform developer relations team, focusing on cloud computing and data developer products such as Google BigQuery. In addition, Michael has written for the tech blogProgrammableWeb.com, has spent time in rural Uganda researching mobile phone use, and holds a master's degree in information management and systems from UC Berkeley's School of Information.



Apache Hadoop YARN: Moving beyond MapReduce and Batch Processing with Apache Hadoop, 1/e

Arun C. Murthy

ISBN: 9789332539105 | © Year: 2014 | Pages: 336

About the Book

In Apache Hadoop YARN, key YARN developer Arun Murthy shows how to get existing code to run on Apache Hadoop 2, and develop new applications that take absolutely full advantage of Hadoop clusters. Drawing on insights from the entire Apache Hadoop 2 team, Murthy and Dr. Douglas Eadline review Apache Hadoop YARN's goals, design, architecture, and components, guide the reader thrugh migrating existing MapReduce applications, identify the functional requirements for each element of an Apache Hadoop 2 application, walk the reader through a sample appliation project, and offer multiple examples and case studies drawn from their cutting-edge experience.

Features

- Written by Arun Murthy, lead developer for Hadoop 2.0.
- Details Architecture of how YARN apps are structured.
- Functional requirements for each element of an application are detailed
- Walk-though of a sample app

Contents

About the Author

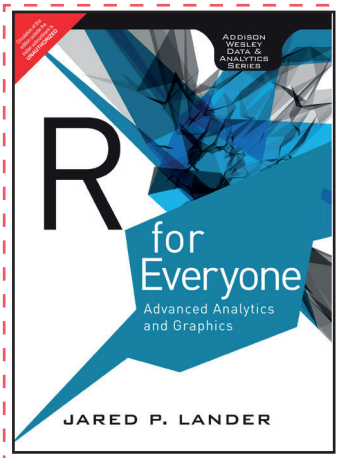
Arun Murthy has contributed to Apache Hadoop full-time since the inception of the project in early 2006. He is a long-term Hadoop committer and a member of the Apache Hadoop Project Management Committee. Previously, he was the architect and lead of the Yahoo Hadoop MapReduce development team and was ultimately responsible, technically, for providing Hadoop MapReduce as a service for all of Yahoo--currently running on nearly 50,000 machines. Arun is the founder and architect of the Hortonworks Inc., a software company that is helping to accelerate the development and adoption of Apache Hadoop. Hortonworks was formed by the key architects and core Hadoop committers from the Yahoo! Hadoop software engineering team in June 2011. Funded by Yahoo! and Benchmark Capital, one of the preeminent technology investors, their goal is to ensure that Apache Hadoop becomes the standard platform for storing, processing, managing, and analyzing big data.

Vinod Kumar Vavilapalli has been contributing to Apache Hadoop project full-time since mid-2007. At Apache Software Foundation, he is a long-term Hadoop contributor, Hadoop committer, member of the Apache Hadoop Project Management Committee, and a foundation member. Vinod is a MapReduce and YARN go-to guy at Hortonworks Inc. For more than five years, he has been working on Hadoop. He was involved in HadoopOnDemand, Hadoop-0.20, CapacityScheduler, Hadoop security, and MapReduce, and is now a lead developer and the project lead for Apache Hadoop YARN. Before Hortonworks, he was at Yahoo!, working in the Grid team that made Hadoop what it is today, running at large scale--up to tens of thousands of nodes. He has a bachelor's degree in computer science and engineering from the Indian Institute of Technology Roorkee. He can be reached at twitter handle @tshooter.

Douglas Eadline, Ph.D., began his career as a practitioner and a chronicler of the Linux Cluster HPC revolution and now documents big data analytics. Starting with the first Beowulf How To document, Doug has written hundreds of articles, white papers, and instructional documents covering virtually all aspects of HPC computing. Prior to starting and editing the popular ClusterMonkey.net website in 2005, he served as editor¬-in-¬chief for ClusterWorld magazine, and was senior HPC editor for Linux Magazine. Currently, he is a consultant to the HPC industry and writes a monthly column in HPC Admin magazine. He is the author of Hadoop Fundamentals LiveLessons (video) from Addison-Wesley.

Joseph Niemiec is a big data solutions engineer whose focus is on designing Hadoop solutions for many Fortune 1000 companies. In this position, Joseph has worked with customers to build multiple YARN applications providing a unique perspective on moving customers beyond batch processing, and has worked on YARN development directly. An avid technologist, Joseph has been focused on technology innovations since 2001. His interest in data analytics originally started in game score optimization as a teenager, and has shifted to helping customers uptake new technology innovations such as Hadoop and, most recently, building new data applications using YARN.

Jeff Markham is a solution engineer at Hortonworks Inc., the company promoting open source Hadoop. Previously, he was with VMware, Red Hat, and IBM, helping companies build distributed applications with distributed data. He has written articles on Java application development and has spoken at several conferences and to Hadoop User Groups. Jeff is a contributor to Apache Pig and Apache HDFS.



R for Everyone: Advanced Analytics and Graphics, 1/e

Jared P. Lander

ISBN: 9789332539242 | © Year: 2014 | Pages: 472

About the Book

Using the free, open source R language, scientists, financial analysts, public policy professionals, and programmers can build powerful statistical models capable of answering many of their most challenging questions. But, for non-statisticians, R can be difficult to learn–and most books on the subject assume far too much knowledge to help the non-statistician. R for Everyone is the solution. Drawing on his extensive experience teaching new users through the New York City R User Group, professional statistician Jared Lander has written the perfect R tutorial for everyone who's new to statistical programming and modeling.

Features

- Based on a course on R and Big Data taught by the author at Columbia.
- Designed from the ground up to help readers quickly overcome R's learning curve.
- Packed with hands-on practice opportunities and realistic, downloadable code examples.
- By an author with unsurpassed experience teaching statistical programming and modeling to novices.
- For every potential R user: programmers, data scientists, DBAs, marketers, quants, scientists, policymakers, and many others.

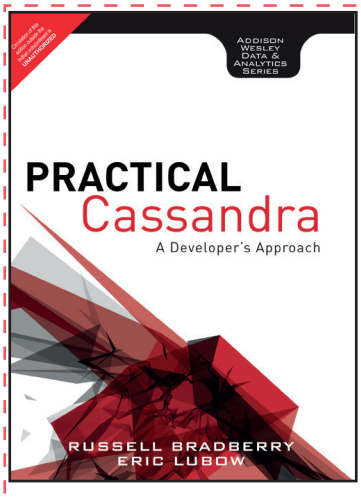
Contents

17. Generalized Linear Models
18. Model Diagnostics
19. Regularization and Shrinkage
20. Nonlinear Models
21. Time Series and Autocorrelation
22. Clustering
23. Reproducibility, Reports and Slide Shows with knitr
24. Building R Packages

Appendix A: Real-Life Resources
Appendix B: Glossary

About the Author

Jared P. Lander is the owner of Lander Analytics, a statistical consultanting firm based in New York City, the organizer of the New York Open Statistical Programming Meetup and an adjunct professor of statistics at Columbia University. He is also a tour guide for Scott's Pizza Tours and an advisor to Brewla Bars, a gourmet ice pop startup. With an M.A. from Columbia University in statistics, and a B.A. from Muhlenberg College in mathematics, he has experience in both academic research and industry. His work for both large and small organizations spans politics, tech startups, fund raising, music, finance, healthcare and humanitarian relief efforts. He specializes in data management, multilevel models, machine learning, generalized linear models, visualization, data management and statistical computing.



Practical Cassandra: A Developer's Approach, 1/e

Russell Bradberry

ISBN: 9789332539235 | © Year: 2014 | Pages: 192

About the Book

Practical Cassandra is the first hands-on developer's guide to building systems that deliver on Cassandra's promises of extraordinary speed, scalability, reliability, and performance. Two pioneering Cassandra developers - including Russell Bradberry, primary author of Cassandra's NodeJS driver - walk the reader through every step of building a real production application. Drawing on their exceptional expertise, they share deep insights into issues ranging from querying to deployment, management, maintenance, and monitoring. Bradberry and DataStax MVP Eric Lubow cover key issues ranging from architecture to migration and guide through navigating crucial decisions needed to make about data modeling.

Features

- Russell Bradberry is the primary author of one of the Cassandra drivers.
- Eric and Russ are both Datastax MVPs and are regular speakers about Cassandra.
- The CTO of Datastax, the support company behind Cassandra, will be providing a foreword and will support the authors writing and promoting the book.
- Cassandra is a key NoSQL database used within the BigData community.

Contents

1. Introduction to Cassandra
2. Installation
3. Data Modeling
4. CQL
5. Deployment and Provisioning
6. Performance Tuning
7. Maintenance
8. Monitoring
9. Drivers and Sample Code
10. Troubleshooting
11. Architecture
12. Case Studies

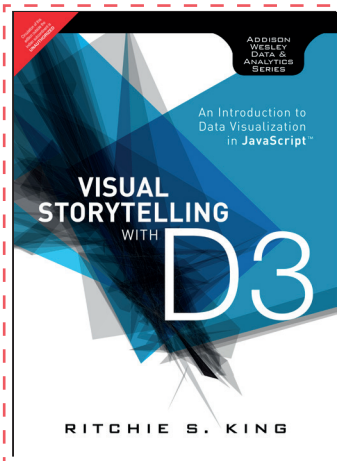
Appendix A: Getting Help
Appendix B: Enterprise Cassandra

About the Author

Russell Bradberry (Twitter: @devdazed) is the principal architect at SimpleReach, where he is responsible for designing and building out highly scalable, high-volume, distributed data solutions. He has brought to market a wide range of products, including a real-time bidding ad server, a rich media ad management tool, a content recommendation system, and, most recently, a real-time social intelligence platform. He is a U.S. Navy veteran, a DataStax MVP for Apache Cassandra, and the author of the NodeJS Cassandra driver Helenus.

Eric Lubow (Twitter: @elubow) is currently chief technology officer of SimpleReach, where he builds highly scalable, distributed systems for processing social data. He began his career building secure Linux systems. Since then he has worked on building and administering various types of ad systems, maintaining and deploying large-scale Web applications, and building email delivery and analytics systems. He is also a U.S. Army combat veteran and a DataStax MVP for Apache Cassandra.

Eric and Russ are regular speakers about Cassandra and distributed systems, and both live in New York City.



Visual Storytelling with D3: An Introduction to Data Visualization in JavaScript, 1/e

Ritchie S. King

ISBN: 9789332559974 | © Year: 2015 | Pages: 280

About the Book

Top infographics expert Ritchie S. King covers both areas needed to master to build truly outstanding infographics with D3: design issues associated with crafting well-conceived infographics that communicate effectively and technical issues associated with wielding the D3 JavaScript library. Combining a strong framework of design principles with detailed, practical instructions, this is the most comprehensive and coherent treatment of D3 ever written. Drawing on his experience a working infographic artist, writer, and JavaScript programmer, King helps the reader rapidly put theory to practical use.

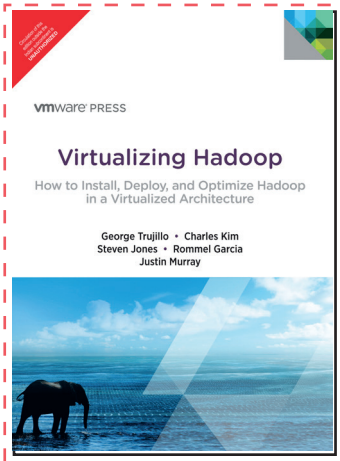
Features

- The perfect resource for technical, design, and media professionals who want to build the world-class infographics that are in incredibly hot demand
- Brings together expert coverage of both infographic design and D3 JavaScript programming
- Illuminates D3's remarkably broad capabilities, from shape drawing and manipulation to transitions, animations, and mapping
- No other resource covers D3 in this much practical detail!

Contents

About the Author

Ritchie S. King is a reporter and visual journalist at FiveThirtyEight.com, focusing on data visualization and interactive features. He previously held a similar role at Quartz. In a previous life, he was a chemical engineer at a start-up trying to turn wood chips and switchgrass into fuel. Though he left engineering to become a journalist, he's still into math and likes to muck with data. His written stories and graphics have appeared in the New York Times, Bloomberg Businessweek, Popular Science, and IEEE Spectrum.



Virtualizing Hadoop, 1/e

Charles R. Kime • George Trujillo

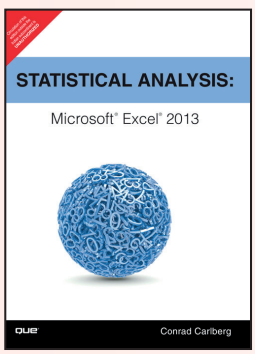
NEW

ISBN: 9789332570436 | © Year: 2016 | Pages: 480

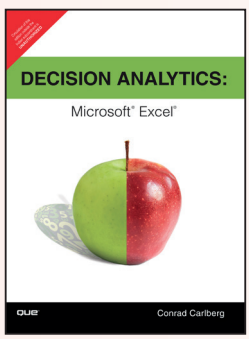
About the Book

Hadoop as a Service combines exceptional clarity for Hadoop newcomers with realistic examples for building deep technical skill. Drawing on their immense experience, the authors identify specific obstacles and challenges in virtualizing Hadoop, helping readers avoid pitfalls, mitigate risks, and achieve superior results.

Also Available



ISBN: 9789332539143
Pages: 512



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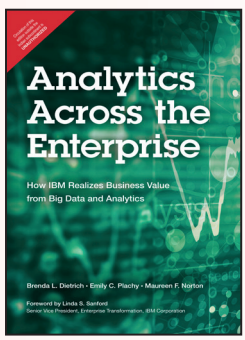
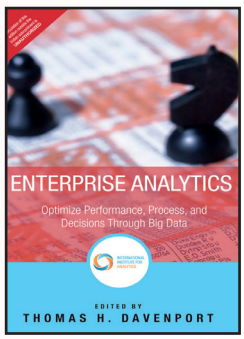
Pages: 288



ISBN: 9789332538306
Pages: 224



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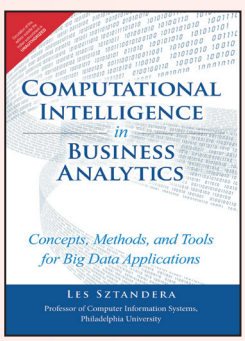

ISBN: 9789332540354
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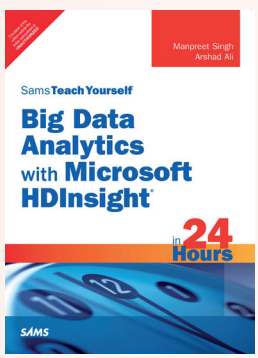

ISBN: 9789332570450
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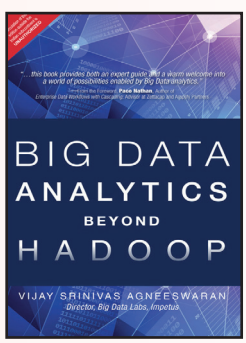
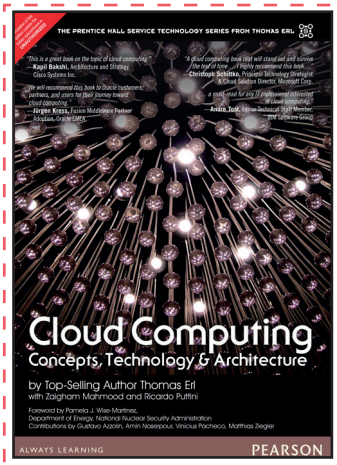


ISBN: 9789332540361
Pages: 240



Cloud Computing: Concepts, Technology & Architecture, 1/e

Thomas Erl • Ricardo Puttini • Zaigham Mahmood

ISBN: 9789332535923 | © Year: 2014 | Pages: 524

About the Book

Cloud Computing: Concepts, Technology and Architecture is the result of years of research and analysis of the commercial cloud computing industry, cloud computing vendor platforms, and further innovation and contributions made by cloud computing industry standards organizations and practitioners. This book breaks down proven and mature cloud computing technologies and practices into a series of well-defined concepts, models, and technology mechanisms. In doing so, the book establishes concrete, academic coverage of fundamental aspects of cloud computing concepts and technologies, carefully described to ensure full alignment with the cloud computing industry.

Features

- Instructor resources including chapter-by-chapter PowerPoint Presentation and an Instructor's Guide
- Structured format and breakdown of cloud computing technologies and models into well-defined components, concepts, and mechanisms makes it ideal for classroom study
- Clean separation of cloud computing topics within book by chapter make for suitable individual lessons or seminars by instructor
- Provides well-researched and well-defined coverage from an industry-centric and vendor-neutral perspective

Contents

About the Authors

Thomas Erl is a top-selling IT author, founder of Arcitura Education, editor of the Service Technology Magazine and series editor of the Prentice Hall Service Technology Series from Thomas Erl. With more than 175,000 copies in print world-wide, his books have become international bestsellers and have been formally endorsed by senior members of major IT organizations, such as IBM, Microsoft, Oracle, Intel, Accenture, IEEE, HL7, MITRE, SAP, CISCO, HP, and many others. As CEO of Arcitura Education Inc. and in cooperation with CloudSchool.com and SOASchool.com, Thomas has led the development of curricula for the internationally recognized Cloud Certified Professional (CCP) and SOA Certified Professional (SOACP) accreditation programs, which have established a series of formal, vendor-neutral industry certifications obtained by thousands of IT professionals around the world.

Dr. Zaigham Mahmood is a published author of six books, four of which are dedicated to cloud computing. He acts as a technology consultant at Debesis Education UK and a Researcher at the University of Derby, UK. He further holds positions as a foreign professor and professor extraordinaire with international educational institutions. Professor Mahmood is a certified cloud trainer and a regular speaker at the International SOA, Cloud + Service Technology Symposium, and he has published more than 100 articles.

Professor Ricardo Puttini has 15 years of field experience as a senior IT consultant at major government organizations in Brazil. He has taught several undergraduate and graduate-level courses in service orientation, service-oriented architecture, and cloud computing. Ricardo was the general chair of the 4th International SOA Symposium and 3rd International Cloud Symposium that was held in the spring of 2011.

Cloud Computing Design Patterns, 1/e

Thomas Erl

ISBN: 9789332557307 | © Year: 2015 | Pages: 599

About the Book

Best-selling author Thomas Erl has brought together the first de facto catalog of design patterns for modern cloud technology architectures, platforms and practices. More than two years in development, the 80+ patterns covered in this book illustrate proven architectural and design solutions to the most common problems and requirements for cloud-based solution design and implementation, with rich, visual documentation including 300+ diagrams. Erl and his colleagues document dozens of cloud computing mechanisms, each representing a well-defined component common to cloud-based environments.

Features

- Presents 80+ patterns and 300 diagrams demonstrating proven architectural and design solutions for the most common cloud challenges.
- Documents dozens of cloud computing mechanisms, each representing a well-defined component of cloud-based environments.
- Introduces cloud computing design patterns with an unprecedented level of technical depth.

Contents

1. Introduction
2. Understanding Design Patterns
3. Sharing, Scaling and Elasticity Patterns
4. Reliability, Resiliency and Recovery Patterns
5. Data Management and Storage Device Patterns
6. Virtual Server and Hypervisor Connectivity and Management Patterns
7. Monitoring, Provisioning and Administration Patterns
8. Cloud Service and Storage Security Patterns
9. Network Security, Identity & Access Management and Trust Assurance Patterns
10. Common Compound Patterns

About the Authors

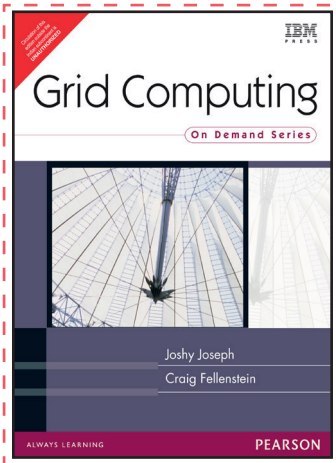
Thomas Erl is a top-selling IT author, founder of Arcitura Education Inc., and series editor of the Prentice Hall Service Technology Series from Thomas Erl. With more than 200,000 copies in print worldwide, his books have become international bestsellers and have been formally endorsed by senior members of major IT organizations, such as IBM, Microsoft, Oracle, Intel, Accenture, IEEE, HL7, MITRE, SAP, CISCO, HP, and many others. As CEO of Arcitura Education Inc., Thomas has led the development of curricula for the internationally recognized Big Data Science Certified Professional (BDSCP), Cloud Certified Professional (CCP), and SOA Certified Professional (SOACP) accreditation programs, which have established a series of formal, vendor-neutral industry certifications obtained by thousands of IT professionals around the world. Thomas has toured more than 20 countries as a speaker and instructor. More than 100 articles and interviews by Thomas have been published in numerous publications, including The Wall Street Journal and CIO Magazine.

Robert Cope has more than 25 years of experience in mission-critical systems development, spanning all aspects of the software system engineering lifecycle from architectural development, experimentation and prototyping, requirements development, design, implementation, and operations to acquisition program management for large systems. With more than 10 years in research, development, and implementation of security architecture, Public Key Infrastructure (PKI) security technology, and security services for large organizations, he has vast experience in information assurance, identity management deployment, operations, and maintenance of large-scale high assurance identity management enclaves.

Robert is the CEO of Homeland Security Consultants, a Federal Risk and Authorization Management Program (FedRAMP)-approved Third Party Assessment Organization (3PAO) for certifying cloud services. He led the development of the virtualization and cloud computing architecture for a large organization and was the chief architect responsible for the development of an enterprise authentication service, leading a team to integrate the organization's identity and access management service architecture using Model Based System Engineering (MBSE) and the System Modeling Language (SysML).

Robert is a Certified Trainer for Arcitura's Cloud School and SOA School. He has been a contributing member of the National Institute of Standards and Technology (NIST) Cloud-adapted Risk Management Framework (CRMF) and a contributing member of the Organization for the Advancement of Structured Information Standards (OASIS) IdCloud Technical Committee. He is also a member of the International Council on Systems Engineering (INCOSE).

A certified IT professional with over 14 years of experience in solution



Grid Computing, 1/e

Joshy Joseph • Craig Fellenstein

ISBN: 9788131708859 | © Year: 2006 | Pages: 400

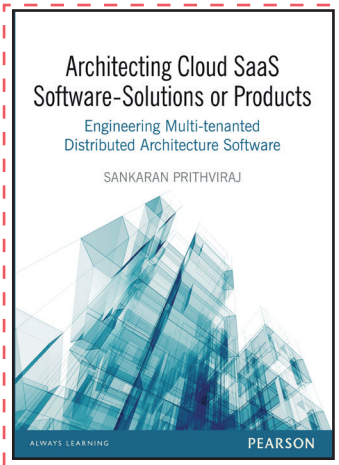
About the Book

The purpose of this book will be to describe several interesting and unique aspects of this exciting new topic. Grid Computing is a type of parallel and distributed system set-up that enables and encourages the sharing of geographically dispersed resources. In many ways, it represents the convergence of supercomputing and web services. The book highlights many achievements in this innovative computer science field, and it is intended to be of value to a wide spectrum of readers around the world regardless. IBM is rapidly establishing itself as the global leader in the topic of Grid Computing. This book not only address IBM's leadership progress in the field, but other global enterprise initiatives, specific areas of interests, synergies between many enterprise partners in this field, and current/future deliveries in the field of Grid Computing. Today, there is no other book like this one that explains the promise and IBM's plans for this important initiative.

Features

- The first look from IBM at a topic of great importance to Big Blue and its business partners.
- Case studies demonstrate how organizations have succeeded with Grid Computing across a variety of industries.
- Significant co-marketing opportunities with IBM.

Contents



Architecting Cloud SaaS Software - Solutions or Products: Engineering Multi-tenanted Distributed Architecture Software, 1/e

Sankaran Prithviraj

NEW

ISBN:9789332537606 | © Year: 2015 | Pages: 216

About the Book

This book has been written from a practical perspective with case studies being used to explain most of the concepts for the benefit of IT professionals who engineer, architect or design cloud SaaS. Technical leads, architects, designers, software engineers and softwaredevelopers also stand to benefit from this book.

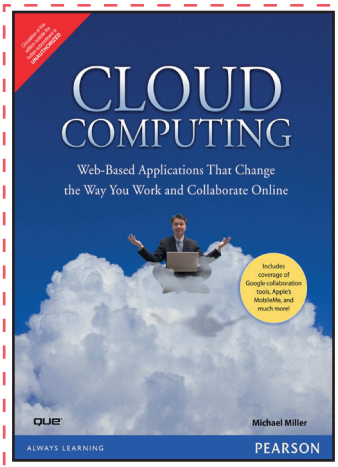
Features

- Helps professionals in marketing, project managers and non-hands on CxOs, who want to know more beyond introductory material on cloud computing.
- Chapters on Cloud SaaS Software and Cloud Compatibility Measure reveal the difference between conventional software and the cloud compatible.
- A chapter on TOGAF, the general purpose architecting methodology, to suit to the specific purpose of architecting cloud compatible SaaS.
- The top management personnel of software firms can benefit from this book as it gives them adequate foundation in the concept of cloud compatible SaaS to which they would otherwise have limited exposure, as sponsors of IT projects.

Contents

About the Author

Sankaran Prithviraj, in his current role as independent technology strategist, provides thought leadership, advises CxOs on technology selection and use as strategic tool for business, and innovates new solutions using emerging technologies such as cloud computing, mobile computing, analytics, and enterprise architecture.



Cloud Computing: Web-Based Applications That Change the Way You Work and Collaborate Online, 1/e

Michael Miller

ISBN: 9788131725337 | ©Year: 2008 | Pages: 312

About the Book

With cloud computing, everything you do is now web-based instead of being desktop-based; you can access all your programs and documents from any computer that's connected to the Internet. Whether you want to share photographs with your family, coordinate volunteers for a community organization, or manage a multi-faceted project in a large organization, cloud computing can help you do it more easily than ever before. Trust us. If you need to collaborate, cloud computing is the way to do it.

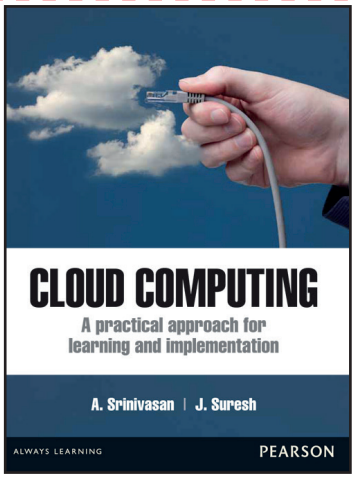
Features

- Perfect for telecommuters, business travelers and even families â€“ online collaboration is the new web frontier.
- The days of bulky, expensive computer programs are fading fast.
- The new paradigm is one in which people use Web-based applications to work, socialize and play without doling out big bucks for bloated software applications that cost more than they're worth.

Contents

About the Author

Michael Miller is a successful and prolific author. He is known for his casual, easy-to-read writing style and his ability to explain a wide variety of complex topics to an everyday audience.



Cloud Computing: A Practical Approach for Learning and Implementation, 1/e

A Srinivasan • J Suresh

ISBN: 9788131776513 | © Year: 2014 | Pages: 440

About the Book

This book lays a good foundation to the core concepts and principles of cloud computing, walking the reader through the fundamental ideas with expert ease. The book advances on the topics in a step-by-step manner and reinforces theory with a full-fledged pedagogy designed to enhance students' understanding and offer them a practical insight into the subject

Features

- Student friendly and easy to understand.
- Fourteen case studies devoted to showcase the implementation of the cloud.
- Provides pertinent insights into the future applications of the cloud.
- In-depth analysis of service-oriented architecture in explicit text spanning three chapters.
- Over 630 exercises.

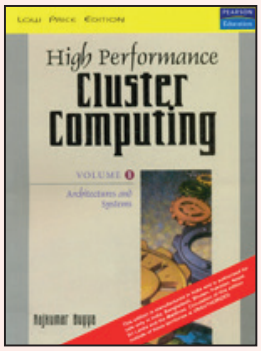
Contents

About the Authors

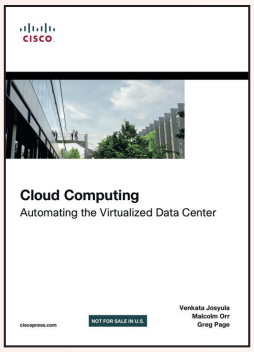
Dr. Srinivasan is Senior Professor and Head, Department of Information Technology, at MNM Jain Engineering College, Chennai. He has over 30 years of teaching experience.

Dr.Suresh Jagannathan is Associate Professor, Department of Computer science, at SSN college of Engineering, Chennai.

Also Available



ISBN: 9788131716939
Pages: 881



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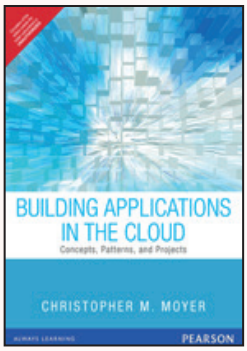

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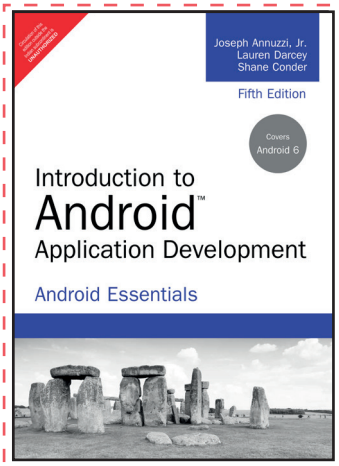


Introduction to Android Application Development, 5/e

Lauren Darcey • Joseph Annuzzi Jr

ISBN: 9789332575127 | ©Year: 2016 | Pages: 704

About the Book

&quotIntroduction to Android&trade Application Development, Fifth Edition, is the most useful real-world guide to building robust, commercial-grade Android apps with the new Android 6 (Marshmallow) SDK, Android Studio, and latest development best practices. Bigger, better, and more comprehensive than ever, this book covers everything students need to start developing professional apps for modern Android devices.

Three well-respected experts guide readers through setting up the development environment, designing user interfaces, developing for diverse devices, and optimizing the entire app-development process. Up-to-date code listings support in-depth explanations of key API features, and each chapter contains at least one sample app. This fifth edition adds brand-new chapters on Material Design, styling applications, design patterns, and querying with SQLite."

Features

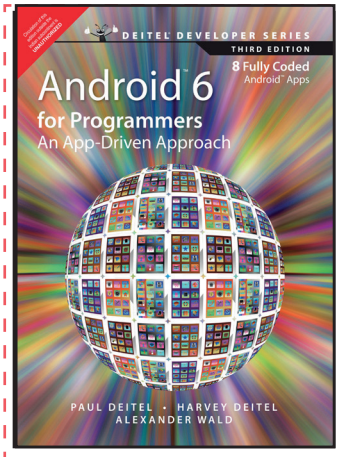
- The definitive Android developer's guide: all the essentials, from concept to market.
- Reflects the authors' decades of in-the-trenches experience with commercial-grade mobile development.
- Covers powerful, lesser-known features, tips and tricks ignored by other books, including how to write apps that are compatible across multiple Android devices and versions.
- Instructor resources available.

Contents

About the Author

Joseph Annuzzi, Jr. is a code warrior, graphic artist, entrepreneur, and author. He usually can be found mastering the Android platform; implementing cutting-edge HTML5 capabilities; leveraging various cloud technologies; speaking in different programming languages; working with diverse frameworks; integrating with various APIs; tinkering with peer-to-peer, cryptography, and biometric algorithms; or creating stunningly realistic 3D renders. He is always on the lookout for disruptive Internet and mobile technologies. He graduated from the University of California, Davis, with a BS in

managerial economics and a minor in computer science, and lives where much of the action is, Silicon Valley. When he is not working with technology, he has been known to lounge in the sun on the beaches of the Black Sea with international movie stars; he has trekked through the Bavarian forest in winter, has immersed himself in the culture of the Italian Mediterranean, and has narrowly escaped the wrath of an organized crime ring in Eastern Europe after his taxi dropped him off in front of the bank ATM they were liquidating. He also lives an active and healthy lifestyle, designs and performs custom fitness training routines to stay in shape, and adores his loyal beagle, Cleopatra.



Android 6 for Programmers: An App-Driven Approach, 1/e

Harvey M. Deitel

NEW

ISBN: 9789332570801 | © Year: 2016 | Pages: 464

About the Book

This book presents leading-edge computing technologies for professional software developers. At the heart of the book is the Deitel &quotapp-driven approach"-concepts are presented in the context of complete working Android apps, rather than using code snippets. The introduction and app test drives at the beginning of each chapter show one or more sample executions.

Features

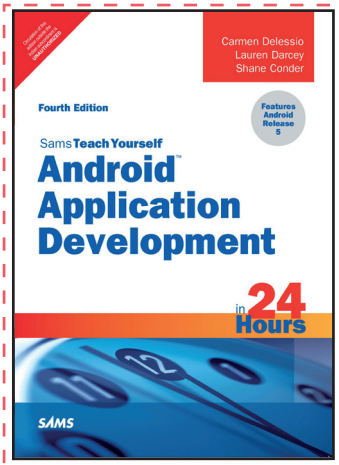
- An update of Deitel's popular tutorial for the Android M and Android Studio 1.3 releases.
- Uses the Deitels' unique application-driven approach; each new technology is discussed in the context of a complete real-world Android App
- Shows how to use Eclipse and Android Development Tools (ADT) for Eclipse to create, debug, and deploy Android apps
- Supported by Deitel Android Resource Center: http://www.deitel.com/ResourceCenters/Programming/Android4/tabid/3630/Default.aspx
- Covers not only programming, but also how to register as an Android Developer and how to sell and market apps on Google Play"

Contents

About the Author

Paul Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of MIT, where he studied Information Technology. Through Deitel & Associates, Inc., he has delivered hundreds of programming courses worldwide to clients, including Cisco, IBM, Siemens, Sun Microsystems, Dell, Fidelity, NASA at the Kennedy Space Center, the National Severe Storm Laboratory, White Sands Missile Range, Rogue Wave Software, Boeing, SunGard Higher Education, Nortel Networks, Puma, iRobot, Invensys and many more. He and his co-author, Dr. Harvey M. Deitel, are the world's best-selling programming- language textbook/professional book/video authors.

Dr. Harvey Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has over 50 years of experience in the computer field. Dr. Deitel earned B.S. and M.S.degrees in Electrical Engineering from MIT and a Ph.D. in Mathematics from Boston University. He has extensive college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc., in 1991 with his son, Paul. The Deitels' publications have earned international recognition, with translations published in Japanese, German, Russian, Spanish, French, Polish, Italian, Simplified Chinese, Traditional Chinese, Korean, Portuguese, Greek, Urdu and Turkish. Dr. Deitel has delivered hundreds of programming courses to corporate, academic, government and military clients.



Android Application Development in 24 Hours, 4/e

Lauren Darcey • Carmen Delessio

New Edition

ISBN: 9789332570474 | © Year: 2016 | Pages: 424

About the Book

In just 24 sessions of one hour or less, students will learn how to build powerful apps for Android - the world's most popular mobile platform. The 4th edition kicks off by introducing the core components of the Android Framework - Activities, Intents, and Service. Using Android Studio, the new Android development environment, students will build complete Android 5.0 apps from the ground up, mastering the skills to design, develop, test, and publish meaningful apps.

Features

- The hands-on introduction to Android programming, fully updated for major platform changes, including the newest Android SDK
- Students write their first app on ""Day 1,"" then master each new concept through carefully-explained code
- Covers everything from user interfaces to location-based services, social networking, polishing applications, and publishing via Android Market

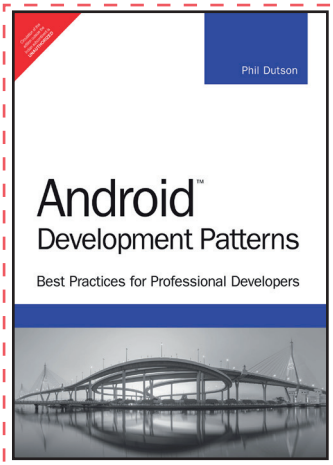
Contents

About the Authors

Carmen Delessio is an experienced application developer who has worked as a developer, technical architect, and CTO in large and small organizations. Carmen began his online development career at Prodigy, where he worked on early Internet applications, shopping apps, and fantasy baseball. He is a graduate of Manhattanville College and lives in Pound Ridge, New York, with his wife, Amy, and daughter, Natalie.

Lauren Darcey is responsible for the technical leadership and direction of a small software company specializing in mobile technologies, including Android and iOS consulting services. With more than two decades of experience in professional software production, Lauren is a recognized authority in application architecture and the development of commercial-grade mobile applications. Lauren received a BS in computer science from the University of California, Santa Cruz.

Shane Conder has extensive application development experience and has focused his attention on mobile and embedded development for well over a decade. He has designed and developed many commercial applications for Android, iOS, BREW, BlackBerry, J2ME, Palm, and Windows Mobileâ€"some of which have been installed on millions of phones worldwide. Shane has written extensively about the tech industry and is known for his keen insights regarding mobile development platform trends. Shane received a BS in computer science from the University of California, Santa Cruz.



Android Development Patterns: Best Practices for Professional Developers, 1/e

Phil Dutson

NEW

ISBN: 9789332573840 | © Year: 2016 | Pages: 312

About the Book

 This reference book is written for intermediate to advanced Android developers. The chapters mirror a normal development life cycle from beginning to end. Each chapter has an introductory image of the Android mascot in some way representing the information contained in the chapter.

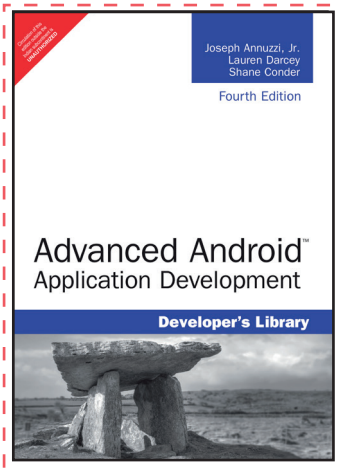
Features

- Targets students who have been working in Android for a long time now, but still need some help with advanced topics
- Assumes the reader is already an accomplished Android developer, but still explains the topics rather than just handing out free code
- Accompanied by the code from the book, a bonus library of usable code, links to additional/useful tools used by pros

Contents

About the Author

Phil Dutson is a Solution Architect over client-side and mobile implementation for one of the world's largest e-commerce retailers in fitness equipment. He has been collecting and developing for mobile devices since he got his hands on a US Robotics Pilot 5000. He is the author of Sams Teach Yourself jQuery Mobile in 24 Hours (Sams, July 2012), jQuery, jQuery UI, and jQuery Mobile: Recipes and Examples (Pearson, November 2012), Android Developer's Cookbook, Second Edition (Pearson, July 2013), and Responsive Mobile Design (Addison-Wesley Professional, September 2014).



Advanced Android Application Development, 4/e

Joseph Annuzzi Jr

ISBN: 9789332552012 | © Year: 2015 | Pages: 608

About the Book

Advanced Android Application Development, 4th Edition is the definitive guide to advanced commercial-grade Android development, updated for the latest Android SDK (KitKat). The book serves as a reference for the Android API. Advanced Android development topics are organized and presented in a clear and concise format. There is in-depth explanation of a given API feature, and associated code for each chapter. Each chapter contains one or more sample apps demonstrating various features of the Android API.

Features

- The code samples provided demonstrate a given particular feature of the Android API
- Each advanced feature presented is discussed in detail, describing it's relation to other elements of Android
- For instructional purposes at schools or companies, PowerPoints provided allow instructors to lead discussions on the chapter as a whole without the need for creating their own chapter outlines

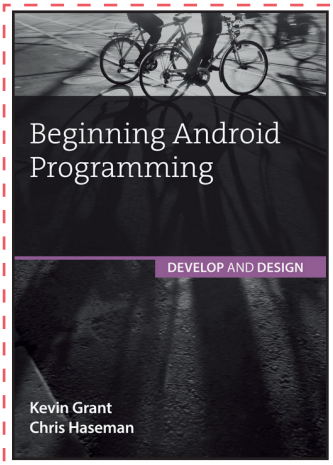
Contents

About the Author

Joseph Annuzzi, Jr., is a freelance software architect, graphic artist, writer, and technical reviewer. He usually can be found mastering the Android platform; implementing cutting-edge HTML5 capabilities; leveraging various cloud technologies; speaking in different programming languages; working with diverse frameworks; integrating with various social APIs; tinkering with peer-to-peer, cryptography, and computer vision algorithms; or creating stunningly realistic 3D renders. He is always on the lookout for disruptive Internet and mobile technologies and has multiple patent applications in process. He graduated from the University of California, Davis, with a B.S. in managerial economics and a minor in computer science, and he lives where much of the action is, Silicon Valley.

Lauren Darcey is responsible for the technical leadership and direction of a small software company specializing in mobile technologies, including Android, iOS, BlackBerry, Palm Pre, BREW, and J2ME, and consulting services. With more than two decades of experience in professional software production, Lauren is a recognized authority in application architecture and the development of commercial-grade mobile applications. Lauren received a B.S. in computer science from the University of California, Santa Cruz.

Shane Conder has extensive development experience and has focused his attention on mobile and embedded development for the past decade. He has designed and developed many commercial applications for Android, iOS, BREW, BlackBerry, J2ME, Palm, and Windows Mobileâ€"some of which have been installed on millions of phones worldwide. Shane has written extensively about the mobile industry and evaluated mobile development platforms on his tech blogs and is well known within the blogosphere. Shane received a B.S. in computer science from the University of California.



Beginning Android Programming: Develop and Design, 1/e

Chris Haseman • Kevin Grant

ISBN: 9789332535930 | © Year: 2014 | Pages: 320

About the Book

In this straight forward guide, Android programming experts Chris Haseman and Kevin Grant show students how to use the powerful set of Android tools to begin writing the next generation of Android applications.

After a tour of how to install and configure the Android Studio and Eclipse,students jump right in, building their first Android project. The pair demonstrate how to use the major building blocks for creating an intuitive and good-looking interface. Next, they show students how to retrieve data and use lists to display data. Chris and Kevin then explore how to use services-important, and often under-utilized, components of the Android platform. The two examine how to handle media and location services before showing students how to write applications for the diverse Android ecosystem and-finally-publish their application.

Features

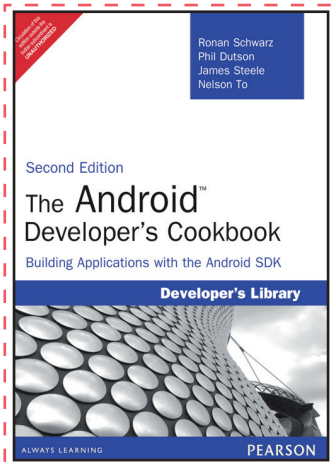
- Start developing applications for the fastest growing mobile OS!
- Individual chapters dedicated to the new Android Studio and to the Eclipse SDK
- Detailed instruction, ample illustrations, and clear examples
- Authors are lead Android developers at Tumbl

Contents

About the Authors

Chris Haseman is the mobile engineering manager at Tumblr. Living in Brooklyn, he has been a professional mobile software engineer since 2003. He's worked on software for Motorola's BREW SMS/MMS messaging software for the Razr/Krazr. He also worked on MusicID, a Java ME app for identifying music preloaded on all AT&T feature phones. More recently, he was the lead developer on doubleTwist's music player and AirSync applications.

Kevin Grant is an Android engineer at Tumblr, a traveler, and a musician living in Manhattan.



The Android Developer's Cookbook: Building Applications with the Android SDK, 2/e

Ronan Schwarz

ISBN: 9789332523876 | © Year: 2014 | Pages: 464

About the Book

The Android&amptrade Developer's Cookbook, Second Edition, has been extensively updated to reflect all Android 4.2.2 releases. You'll find all-new chapters on advanced threading and UI development, in-app billing, push messages, and native development, plus new techniques for everything from accessing NFC hardware to using Google Cloud Messaging. Proven modular recipes take your students from the basics all the way to advanced services, helping them to make the most of the newest Android APIs and tools. The authors' fully-updated code samples are designed to serve as templates for your students' own projects and components. They'll learn best-practice techniques for efficiently solving common problems and for avoiding pitfalls throughout the entire development lifecycle.

Features

- Source of useful, reliable Android code: now completely updated and revised for the newest Android SDKs, technology updates, and best practices
- 50% new material, plus updates throughout: fast access to real solutions for Jelly Bean and other Android 4.x SDKs and APIs
- Targets real-world programming challenges, while also offering a coherent Android development reference: from the basics to high-level services
- Demonstrates best practices with real-life "straight from the trenches" code implementations, ready to download and use
- Provides code recipes and insights on topics that just aren't covered elsewhere, including Sensor Simulator, IntentQueue Service pattern variants, and more

Contents

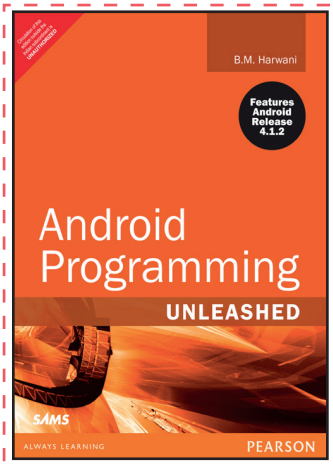
About the Authors

Ronan "Zero" Schwarz, cofounder of OpenIntents, has built Android apps since 2007 and helped create SplashPlay and Droidspray-top Google Android Developer Challenge finalists.

Phil Dutson is lead eCommerce developer for ICON Health and Fitness. He wrote Sams Teach Yourself jQuery Mobile in 24 Hours.

James Steele, vice president of engineering at Sensor Platforms, focuses on helping app developers leverage user motion and context information more easily.

Nelson To markets multiple apps at Google Play. He has worked on enterprise Android apps for Think Computer, Inc., AOL (AIM), Stanford University, and Logitech.



Android Programming Unleashed, 1/e

B.M Harwani

ISBN: 9789332515840 | © Year: 2014 | Pages: 696

About the Book

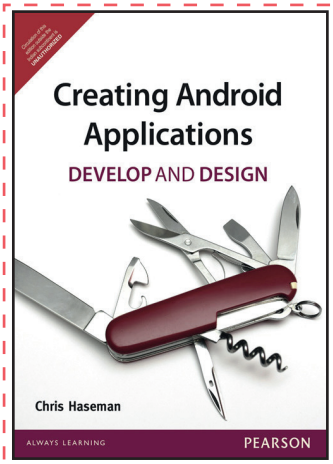
Android Programming Unleashed is the most comprehensive and technically sophisticated guide to best-practice Android development with today's powerful new versions of Android: 4.1 (Jelly Bean) and 4.0.3 (Ice Cream Sandwich). Offering the exceptional breadth and depth developers have come to expect from the Unleashed series, it covers everything programmers need to know to develop robust, high-performance Android apps that deliver a superior user experience.

Leading developer trainer Bintu Harwani begins with basic UI controls, then progresses to more advanced topics, finally covering how to develop feature rich Android applications that can access Internet-based services and store data. He illuminates each important SDK component through complete, self-contained code examples that show developers the most effective ways to build production-ready code. Coverage includes: understanding the modern Android platform from the developer's standpoint... using widgets, containers, resources, selection widgets, dialogs, and fragments... supporting actions and persistence... incorporating menus, ActionBars, content providers, and databases... integrating media and animations... using web, map, and other services... supporting communication via messaging, contacts, and emails... publishing Android apps, and much more.

Contents

About the Author

B.M. Harwani is founder and owner of Microchip Computer Education (MCE), based in Ajmer, India, that provides computer education in all programming and web developing platforms. He graduated with a BE in computer engineering from the University of Pune, and also has a C Level (master's diploma in computer technology) from DOEACC, Government of India. Being involved in the teaching field for more than 18 years, he has developed the art of explaining even the most complicated topics in a straightforward and easily understandable fashion. To know more, visit his blog http://bmharwani.com/blog.



Creating Android Applications: Develop and Design, 1/e

Chris Haseman

ISBN: 9788131786895 | © Year: 2012 | Pages: 280

About the Book

Creating Android Applications: Develop and Design starts with platform installation and then winds its way around commonly made mistakes as it covers the basics of application development. Along the way the author takes side trips to teach about GPS sensors, media playback, and advanced graphics. At its core, this book teaches Android development using accessible, simple language and straightforward, code-based tutorials.

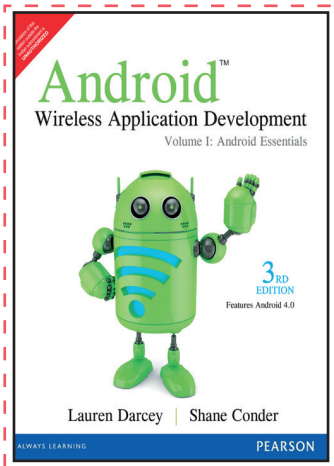
Features

Readers learn practical techniques for building Android applications with plenty of real-world advice and guidance.

- Readers learn how to design and develop Android applications by getting right to work building applications.
- The book offers plenty of real-world advice and guidance.
- The author is an engineer on doubleTwist, named one of the top ten Android applications for 2011 by Newsweek.

About the Author

Chris Haseman has been writing mobile software in various forms since 2003. He was involved in several large-scale BREW projects, from MMS messaging to Major League Baseball. More recently, he was an early Android engineer behind the doubleTwist media player, and is now the lead Android developer for Tumblr. He's a faculty member of General Assembly in New York City, teaching Android development. He lives in Brooklyn, where he constantly debates shaving his beard.



Android Wireless Application Development, 3/e

Shane Conder • Lauren Darcey

ISBN: 9789332518889 | © Year: 2014 | Pages: 420

About the Book

Since Android's earliest releases, Android Wireless Application Development has earned a reputation as the most useful real-world guide for everyone who wants to build robust, commercial-grade Android apps. Now, authors Lauren Darcey and Shane Conder have systematically revised and updated this guide for the brand new version 4 of the Android SDK. To accommodate extensive new coverage, they've also split the book into two volumes. Volume I covers all the essentials of modern Android development, offering expert insights for the entire app development lifecycle, from concept to market. Darcey and Conder go beyond Android's core features, covering many of the SDK's most interesting and powerful features, from LiveFolders to wallpaper customization.

Features

- The #1 guide to Android development, massively updated for verison 4 of the Android SDK, code-named "Ice Cream Sandwich"
- Volume 1 of Darcey and Conder's definitive Android developer's guide: all the essentials, from concept to market

- Reflects the authors' decades of in-the-trenches experience with commercial-grade mobile development

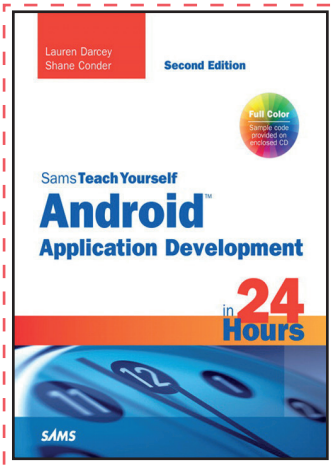
Covers powerful, lesser-known features, tips and tricks ignored by other books, including how to write apps that are compatible across multiple Android devices and versions

Contents

About the Authors

Lauren Darcey is responsible for the technical leadership and direction of a small software company specializing in mobile technologies, including Android, iOS, Blackberry, Palm Pre, BREW, and J2ME and consulting services. With more than two decades of experience in professional software production, Lauren is a recognized authority in application architecture and the development of commercial-grade mobile applications. Lauren received a B.S. in Computer Science from the University of California, Santa Cruz.

Shane Conder has extensive development experience and has focused his attention on mobile and embedded development for the past decade. He has designed and developed many commercial applications for Android, iOS, BREW, Blackberry, J2ME, Palm, and Windows Mobile--some of which have been installed on millions of phones worldwide. Shane has written extensively about the mobile industry and evaluated mobile development platforms on his tech blogs and is well-known within the blogosphere. Shane received a B.S. in Computer Science from the University of California.



Sams Teach Yourself Android Application Development in 24 Hours, 2/e

Shane Conder • Lauren Darcey

ISBN: 9788131791332 | © Year: 2012 | Pages: 512

Features

- The hands-on introduction to Android programming, fully updated for major platform changes, including the new Android 3.0 (Honeycomb)
- Readers write their first app on "Day 1," then master each new concept through carefully-explained code
- Covers everything from user interfaces to location-based services, social networking, polishing applications, and publishing via Android Market
- A CD of all source code will be included with this edition of the book.

Contents

About the Authors

Lauren Darcey is responsible for the technical leadership and direction of a small software company specializing in mobile technologies, including Android, iPhone, BlackBerry, Palm Pre, BREW, and J2ME, and consulting services. With more than two decades of experience in professional software production, Lauren is a recognized authority in enterprise architecture and the development of commercial-grade mobile applications. Lauren received a B.S. in Computer Science from the University of California, Santa Cruz.

Shane Conder has extensive development experience and has focused his attention on mobile and embedded development for the past decade. He has designed and developed many commercial applications for Android, iPhone, BREW, BlackBerry, J2ME, Palm, and Windows Mobile some of which have been installed on millions of phones worldwide. Shane has written extensively about the mobile industry and evaluated mobile development platforms on his tech blogs and is well known within the blogosphere. Shane received a B.S. in Computer Science from the University of California.

Android User Interface Design: Implementing Material Design for Developers, 2/e

Ian Clifton

NEW

ISBN: 9789332570924 | © Year: 2016 | Pages: 448

About the Book

Android User Interface Design focuses on implementing beautiful Android design for developers. The goal is to help Android developers from relative beginners to experts ensure their apps look as good as possible by following best practices, creating custom components, and implementing advanced drawing techniques. The book first discusses Android UI and standard components, then focuses on the process of creating an app from concept to completion, and finally moves on to advanced techniques to really make an app stand out.

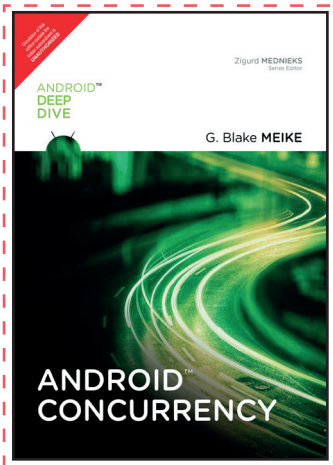
Features

- The first best-practice guide to superb Android smartphone and tablet app design
- Integrates graphics issues, implementation details, and the entire design process
- Introduces graphic design principles developers may never have encountered before
- Includes a hands-on case study section, and extensive downloadable sample code, including complete finished apps"

Contents

About the Author

Ian G. Clifton is a professional Android application developer, user experience advocate, and author. He has worked with many developers and designers, and led Android teams, creating well-known apps such as Saga, CNET News, CBS News, and more.



Android Concurrency, 1/e

G. Blake Meike

NEW

ISBN: 9789332578470 | © Year: 2017 | Pages: 216

About the Book

Top Android developer and consultant Blake Meike has created a complete cookbook of best-practice solutions for fully leveraging the multi-core processors and heavily cached architectures now widespread on Android devices, and for taking advantage of significant improvements in the new Android 5 (Lollipop) release. Students will find intensely practical solutions for everything from inter-thread communication to network communication to debugging complex concurrency issues. Android Concurrency combines in-depth knowledge, proven patterns and idioms, and expert guidance on avoiding problems.

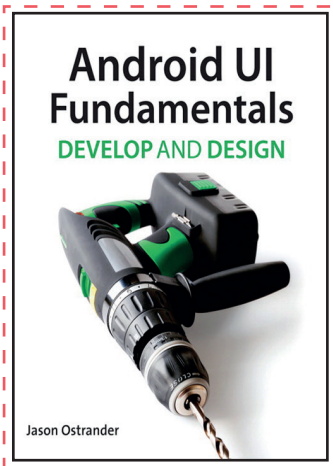
Features

- Not a generic "concurrency" book: focused 100% on Android
- By Blake Meike, one of the world's most respected Android developers
- Covers powerful new SDK updates in the Android Lollipop 5 release
- The first in our new Android Deep Dive series from Addison-Wesley: edited by Zigurd Mednieks, one of the world's leading Android development consultants

Contents

About the Author

Blake Meike is a passionate engineer, architect, and code poet. As an author, speaker, and instructor, he has taught thousands of people how to write Android apps that aren't toys. He has more than 20 years of coding experience, most of it with Java, building systems as large as Amazon's massively scalable AutoScaling service and as small as a pre-Android OSS Linux/ Java-based platform for cell phones. He is co-author of several other books, including O'Reilly's bestselling Programming Android and Wiley's Enterprise Android. Blake holds a degree in Mathematics and Computer Science from Dartmouth College and was a founding member of Twitter University. He lives in Oakland, CA, and works for Cyanogen Inc.



Android UI Fundamentals: Develop & Design, 1/e

Jason Ostrander

ISBN: 9789332502239 | © Year: 2013 | Pages: 336

About the Book

Author Jason Ostrander walks developers through the different choices available on their way to creating a well-designed application for Android. While building a simple application, Jason works through the basics of Android UI development including layout, event handling, menus and notifications. The author then shows the proper way to load and display images, create advanced dialogs and progress indicators, add animation, and how to build custom UI elements. Jason discusses the proper way of adding interaction through gestures and the advanced graphical options available using Canvas, Renderscript and OpenGL. Finally, he discusses tablet development, the unique differences between phone and tablet UI, and the new APIs available to tablet developers.

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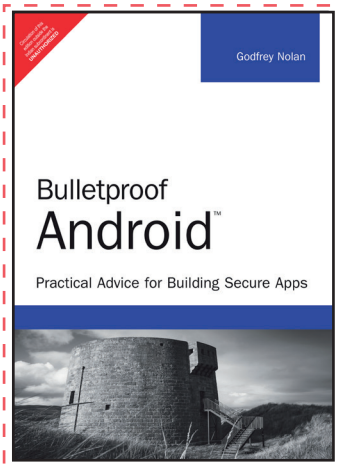


Bulletproof Android: Bulletproof Android, 1/e

Godfrey Nolan

ISBN: 9789332552326 | © Year: 2015 | Pages: 232

About the Book

In Bulletproof Android, Godfrey Nolan brings together comprehensive, up-to-date best practices for writing apps that resist attack and won't leak information. Unlike other Android security books focused on &quotbreaking" code, Bulletproof Android focuses on strengthening code security throughout the entire development lifecycle. Nolan covers authentication, networking, databases, server attacks, libraries, hardware, and more. He illuminates each technique with code examples, offering expert advice on implementation and trade-offs

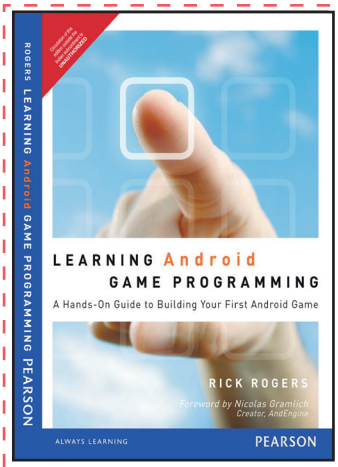
Features

- Teaches how to write Android apps that are secure - gives you the tools to wipe out those insecurities.
- All tactics and techniques covered in detail with corresponding code, pros and cons, as well as best practices.
- Source code is included, with each sub-section having corresponding simple but complete app that demonstrates how to fix the issues raised

Contents

About the Author

Godfrey Nolan is the founder and president of the mobile and web development company RIIS LLC based in Troy, Michigan, and Belfast, Northern Ireland. This is his fourth book. He has had a healthy obsession with reverse engineering bytecode since he wrote "Decompile Once, Run Anywhere," which first appeared in Web Techniques magazine way back in September 1997. Godfrey is originally from Dublin, Ireland.



Learning Android Game Programming: A Hands-On Guide to Building Your First Android Game, 1/e

Rick Rogers

ISBN: 9788131786994 | © Year: 2012 | Pages: 840

About the Book

Learning Android Game Programming brings together all the knowledge and sample code that even casual or "junior" Android developers need to develop low-budget 2D games with Java and XML. For the first time, it makes Android game development practical for thousands of developers who don't have the resources to build highly-complex 3D games. Rather than focusing on difficult, highly-optimized native C libraries, this book relies on the far more accessible And Engine framework and Java/Dalvik virtual machine.

Features

- Perfect for game developers who don't have huge resources, and want to quickly create successful low-budget 2D games for Android smartphones and tablets.
- Offers practical guidance for designing simple games that are ideally suited to Android mobile devices.
- Provides solutions and example code for all key elements of a game app, from user interface to physics engine.

Contents

About the Author

Rick Rogers has been developing software for more than thirty years and has been focused on software for mobile devices for the last twelve years. He is the author of numerous technical magazine articles and a previous book on introductory Android application development. He has developed mobile device software for large and small companies, and participated in international consortia that have shaped the evolution of mobile devices.

Android Apps with App Inventor: The Fast and Easy Way to Build Android Apps, 1/e

Jorg H. Kloss

ISBN: 9789332502154 | © Year: 2013 | Pages: 600

About the Book

Kloss begins with the absolute basics of program structure, syntax, flow, and function, and then demonstrates simple ways to solve today's most common mobile development problems. Along the way he teaches the reader to build a dozen real Android apps, from games and geotrackers to navigation systems and news tickers. By the end of the book, the reader will be comfortable implementing advanced apps and mashups integrating realtime multimedia data from all kinds of Web services with the communication and sensor-based features of a smartphone.

Features

- Helps anyone use Google App Inventor to quickly build robust, modern Android apps
- Covers installation, setup, design, media, data storage, graphics, phone, SMS, email, voice recognition/output, data exchange, and more
- Includes detailed walkthroughs and five complete app examples
- Foreword by MIT Professor and Google App Inventor Team Member Hal Abelson

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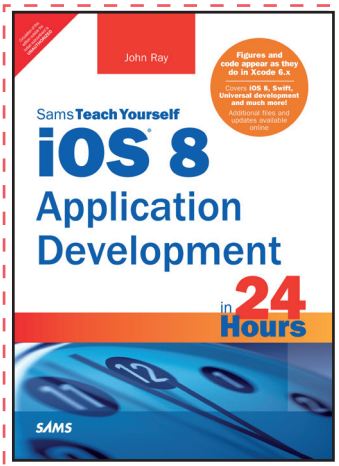

iOS 8 Application Development in 24 Hours, Sams Teach Yourself, 6/e

NEW

John Ray

ISBN: 9789332557321 | © Year: 2016 | Pages: 480

About the Book

IOS Application Development in 24 Hours, Sams Teach Yourself offers a unique approach to learning iOS development by explaining all the core concepts needed to get started quickly. Readers will learn everything from how to install the Xcode developer tools to how the Objective-C language works, what the Model-View-Controller design pattern is, and, of course, how to build real, working applications that take advantage of the latest versions of iOS and Xcode. Each chapter provides a hands-on exercise for students to complete and detailed steps describing the development process.

Features

- Provides a start to finish view of application development for the iOS platform for beginners
- Written by experienced author and Mac programmer, John Ray
- Code and figures presented in full color for easier comparison to Xcode
- Each new technology introduced is backed up with fully-documented code samples, including explanations of the Objective-C syntax

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HOUR 12: Making Choices with Toolbars and Pickers
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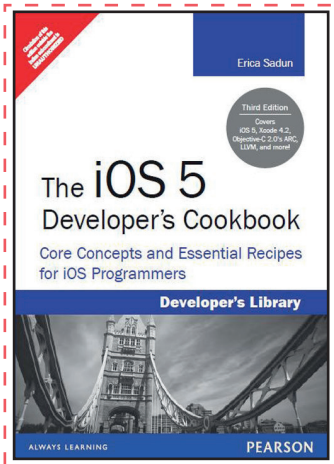
HOUR 21: Implementing Location Services
HOUR 22: Building Background-Ready Applications
HOUR 23: Building Universal Applications
HOUR 24: Application Tracing, Monitoring, and Debugging

About the Authors

John Ray currently serves as the Director of the Office of Research Information Systems at The Ohio State University. He has written numerous books for Macmillan/Sams/Que, including Using TCP/IP: Special Edition, Teach Yourself Dreamweaver MX in 21 Days, Mac OS X Unleashed, My Yosemite MacBook, and Teach Yourself iOS 7 Development in 24 Hours. As a Macintosh user since 1984, he strives to ensure that each project presents the Macintosh with the equality and depth it deserves. Even technical titles such as Using TCP/IP contain extensive information about the Macintosh and its applications and have garnered numerous positive reviews for their straightforward approach and accessibility to beginner and intermediate users.



iOS 5 Developer's Cookbook, Core Concepts and Essential Recipes for iOS Programmers, 3/e

Erica Sadun

ISBN: 9788131791479 | © Year: 2012 | Pages: 926

Features

- Fully revised for the newest features of Apple's iOS 5 for iPhone, iPad, and iPod touch
- Designed to help new iOS developers get started fast with Objective-C and Xcode 4
- Shows iOS developers how to make the most of Apple's frameworks in their apps

Contents

1. Introducing the iOS SDK
2. Objective-C Boot Camp
3. Designing Interfaces
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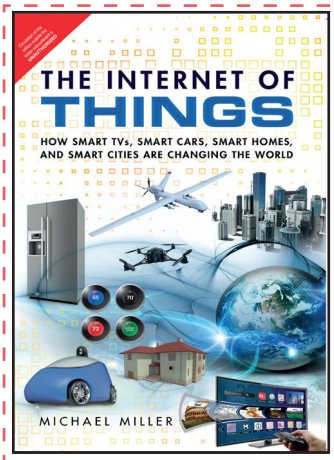
9. Working with Text
10. Creating and Managing Table Views
11. A Taste of Core Data
12. Alerting the User
13. Device Capabilities
14. Networking

About the Author

Erica Sadun is the bestselling author, coauthor, and contributor to several dozen books on programming, digital video and photography, and other technology topics. Sadun has authored dozens of iPhone-native applications, offers rapid-prototype consulting, and has blogged for many sites including Ars Technica, O'Reilly, and LifeHacker. She currently blogs regularly for TUAW. She holds a Ph.D. in Computer Science from Georgia Tech.



The Internet of Things: How Smart TVs, Smart Cars, Smart Homes, and Smart Cities Are Changing the World, 1/e

Michael Miller

NEW

ISBN: 9789332552456 | © Year: 2015 | Pages: 336

About the Book

How the Internet of Things will change your life: all you need to know, in plain English!

The Internet of Things (IoT) won't just connect people: It will connect "smart" homes, appliances, cars, offices, factories, cities ...the world. You need to know what's coming: It might just transform your life.

Now, the world's #1 author of beginning technology books has written the perfect introduction to IoT for everyone. Michael Miller shows how connected smart devices will help people do more, do it smarter, do it faster. He also reveals the potential risks to your privacy, your freedom, and maybe your life.

Make no mistake: IoT is coming quickly. Miller explains why you care, helps you use what's already here, and prepares you for the world that's hurtling toward you.

What is IoT? How does it work? How will it affect me?
What's realistic, and what's just hype?
How smart is my "smart TV" really? (And, is it watching me?)
Can smart IoT devices make me healthier?
Will smart appliances ever be useful?
How much energy could I save with a smart home?
What's the future of wearable tech?
When will I have a self-driving car?
When will I have a nearly self-driving car? (Hint: Surprisingly soon.)
Is IoT already changing the way I shop?
What's the future of drones, at war and in my neighborhood?
Could smart cities lower my taxes?
Who gets the data my devices are collecting?
How can I profit from the Internet of Things?
What happens when the whole world is connected?
Will I have any privacy left at all?

Features

- What the IoT is, why it's important, how it works, and how it will impact everyone's life -- especially yours.
- All you need to know about smart appliances, cars, homes, clothing, aircraft, homes, businesses, and cities.
- A realistic guide to privacy in an era when all your devices are talking to each other.
- By Michael Miller, the world's #1 author of easy-to-understand technology books for beginners!.

Contents

About the Authors

Michael Miller has written more than 150 nonfiction how-to books over the past two decades, as well as a variety of web articles. His best-selling books include Que's Absolute Beginner's Guide to Computer Basics, The Ultimate Guide to Bitcoin, and Is It Safe? Protecting Your Computer, Your Business, and Yourself Online. Collectively, his books have sold more than 1 million copies worldwide.

Miller has established a reputation for clearly explaining technical topics to nontechnical readers and for offering useful real-world advice about complicated topics. More information can be found at the author's website, located at www.millerwriter.com. His Twitter handle is @molehillgroup.

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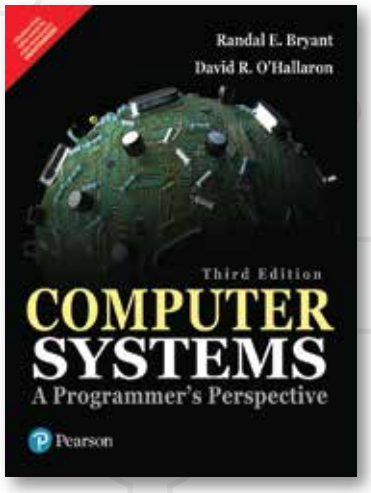

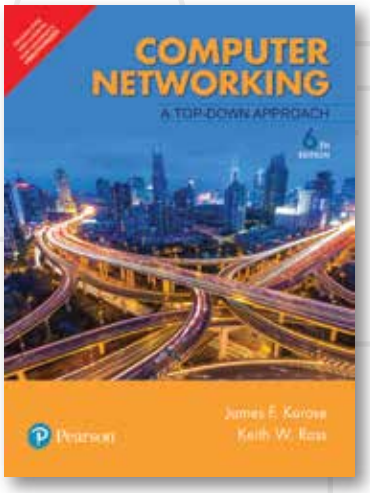

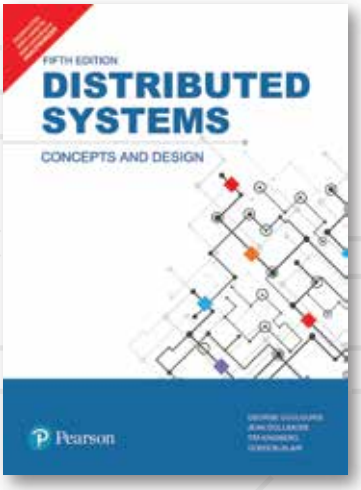

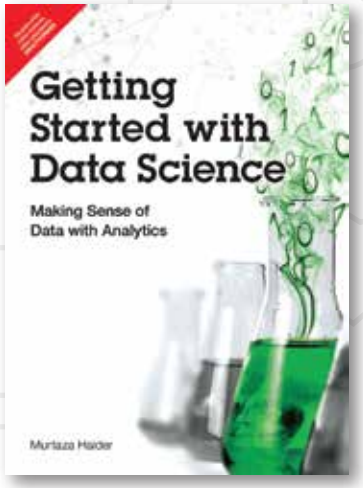

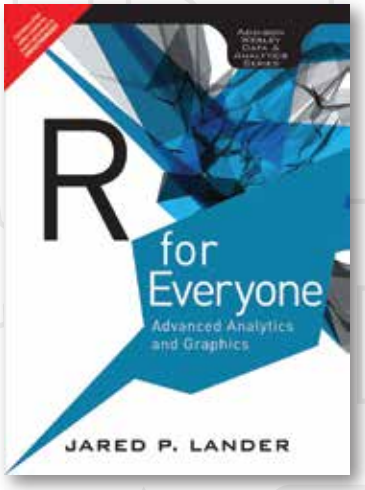

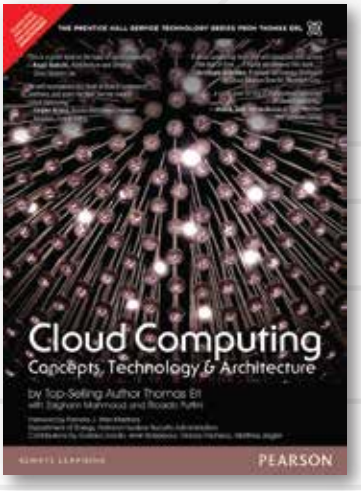

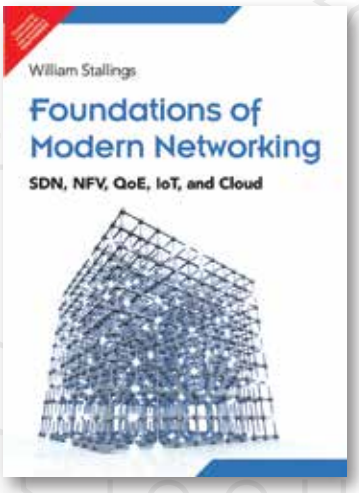

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