Contemporary Logic Design 2nd Edition Exercise Solution

Logic Primer presents a rigorous introduction to natural deduction systems of sentential and first-order logic. Logic Primer presents a rigorous introduction to natural deduction systems of sentential and first-order logic. The text is designed to foster the student-instructor relationship. The key concepts are laid out in concise definitions and comments, with the expectation that the instructor will elaborate upon them. New to the second edition is the addition of material on the logic of identity in chapters 3 and 4. An innovative interactive Web site, consisting of a "Logic Daemon" and a "Quizmaster," encourages students to formulate their own proofs and links them to appropriate explanations in the book. A COMPREHENSIVE GUIDE TO THE DESIGN & ORGANIZATION OF MODERN COMPUTING SYSTEMS Digital Logic Design and Computer Organization with Computer Architecture for Security provides practicing engineers and students with a clear understanding of computer hardware technologies. The fundamentals of digital logic design as well as the use of the Verilog hardware description language are discussed. The book covers computer organization and architecture, modern design concepts, and computer security through hardware. Techniques for designing both small and large combinational and sequential circuits are thoroughly explained. This detailed reference addresses memory technologies, CPU design and techniques to increase performance, microcomputer architecture, including "plug and play" device interface, and memory hierarchy. A chapter on security engineering methodology as it applies to computer architecture concludes the book. Sample problems, design examples, and detailed

diagrams are provided throughout this practical resource. COVERAGE INCLUDES: Combinational circuits: small designs Combinational circuits: large designs Sequential circuits: core modules Sequential circuits: small designs Sequential circuits: large designs Memory Instruction set architecture Computer architecture: interconnection Memory system Computer architecture: security

Edited by a team of four leading philosophers, The Norton Introduction to Philosophy introduces students to contemporary perspectives on major philosophical issues and questions. This text features an impressive array of readings, including 25 specially-commissioned essays by prominent philosophers. A student-friendly presentation, a handy format, and a low price make The Norton Introduction to Philosophy as accessible and affordable as it is up-to-date.

It is because mathematics is often misunderstood, it is commonly believed it has nothing to say about politics. The high school experience with mathematics, for so many the lasting impression of the subject, suggests that mathematics is the study of numbers, operations, formulas, and manipulations of symbols. Those believing this is the extent of mathematics might conclude mathematics has no relevance to politics. This book counters this impression. The second edition of this popular book focuses on mathematical reasoning about politics. In the search for ideal ways to make certain kinds of decisions, a lot of wasted effort can be averted if mathematics can determine that finding such an ideal is actually impossible in the first place. In the first three parts of this book, we address the following three political questions: (1) Is there a good way to choose winners of elections? (2) Is there a good way to apportion congressional seats? (3) Is there a good way to make decisions in situations of conflict and uncertainty? In the fourth and final part of this book, we examine the Electoral College system that is used

in the United States to select a president. There we bring together ideas that are introduced in each of the three earlier parts of the book.

Contemporary Logic DesignPrentice Hall

Describes ways to incorporate domain modeling into software development.

Esta enciclopedia presenta numerosas experiencias y discernimientos de profesionales de todo el mundo sobre discusiones y perspectivas de la la interacción hombre-computadoras

For courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. 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.

This new edition of A Companion to Contemporary Political Philosophy has been extended significantly to include 55 chapters across two volumes written by some of today's most distinguished scholars. New contributors include some of today’s most distinguished scholars, among them Thomas Pogge, Charles Beitz, and Michael Doyle Provides in-depth coverage of contemporary philosophical debate in all major related disciplines, such as economics, history, law, political science, international relations and sociology Presents analysis of key political ideologies, including new chapters on Cosmopolitanism and Fundamentalism Includes detailed discussions of major concepts in political philosophy, including virtue, power, human rights, and just war

Intelligent readers who want to build their own embedded computer systems-- installed in everything from cell phones to cars to handheld organizers to refrigerators-- will find this book to be the most in-depth, practical, and up-to-date guide on the market. Designing Embedded Hardware carefully steers between the practical and philosophical aspects, so developers can both create their own devices and gadgets and customize and extend off-the-shelf systems. There are hundreds of books to choose from if you need to learn programming, but only a few are available if you want to learn to create hardware. Designing Embedded Hardware provides software and hardware engineers with no prior experience in embedded systems with the necessary conceptual and design building blocks to understand the architectures of embedded systems. Written to provide the depth of coverage and real-world examples developers need, Designing Embedded Hardware also provides a road-map to the pitfalls and traps to avoid in designing embedded systems. Designing Embedded Hardware covers such essential topics as: The principles of developing computer hardware Core hardware designs Assembly language concepts Parallel I/O Analog-digital conversion Timers (internal and external) UART Serial Peripheral Interface Inter-Integrated Circuit Bus Controller Area Network (CAN) Data Converter Interface (DCI) Low-power operation This invaluable and eminently useful book gives you the practical tools and skills to develop, build, and program your own application-specific computers.

This book takes an authoritative introduction to basic

principles of digital design and practical requirements in both board-level and VLSI systems. Digital Design covers the most widespread logic design practices while building a solid foundation of theoretical and engineering principles. This easy-to-follow book uses a practical writing style. Includes low voltage and LVCMOS/LVTTL. Coverage of Complex Programmable Logic Devices (CPLDs) and Field-Programmable Gate Arrays (FPGAs). Introduction of HDL-based digital design Covers VHDL as well as ABEL. Including simulation and synthesis. This comprehensive text on switching theory and logic design is designed for the undergraduate students of electronics and communication engineering, electrical and electronics engineering, electronics and instrumentation engineering, telecommunication engineering, computer science and engineering, and information technology. It will also be useful to AMIE, IETE and diploma students. Written in a student-friendly style, this book, now in its Second Edition, provides an in-depth knowledge of switching theory and the design techniques of digital circuits. Striking a balance between theory and practice, it covers topics ranging from number systems, binary codes, logic gates and Boolean algebra to minimization using K-maps and tabular method, design of combinational logic circuits, synchronous and asynchronous sequential circuits, and algorithmic state machines. The book discusses threshold gates and programmable logic devices (PLDs). In addition, it elaborates on flip-flops and shift registers. Each chapter includes several fully worked-out examples so that the students get a thorough grounding in related design

concepts. Short questions with answers, review questions, fill in the blanks, multiple choice questions and problems are provided at the end of each chapter. These help the students test their level of understanding of the subject and prepare for examinations confidently. NEW TO THIS EDITION • VHDL programs at the end of each chapter • Complete answers with figures • Several new problems with answers

For sophomore courses on digital design in an Electrical Engineering, Computer Engineering, or Computer Science department. & Digital Design, fourth 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.

In the decade since the first edition of this book was published, the technologies of digital design have continued to evolve. The evolution has run along two related tracks: the underlying physical technology and the software tools that facilitate the application of new devices. The trends identified in the first edition have continued and promise to continue to do so. Programmable logic is virtually the norm for digital designers and the art of digital design now requires the software skills to deal with hardware description languages. Hardware designers now spend the majority of their time dealing with software. Specifically, the tools needed to efficiently map digital designs onto the emerging programmable devices that are growing more

sophisticated. They capture their design specifications in software with language appropriate for describing the parallelism of hardware; they use software tools to simulate their designs and then to synthesize it into the implementation technology of choice. Design time is radically reduced, as market pressures require products to be introduced quickly at the right price and performance. Although the complexity of designs is necessitating ever more powerful abstractions, the fundamentals remain unchanged. The contemporary digital designer must have a much broader understanding of the discipline of computation, including both hardware and software. This broader perspective is present in this second edition.

This book, first published in 2000, is the main bibliographical listing of Greek New Testament manuscripts.

Foundations of Physical Activity and Public Health is the first textbook to clearly define the intersection of kinesiology and public health. Authors Kohl and Murray, both leaders in the field, offer a solid introduction to the concepts of public health and kinesiology, the techniques used to measure physical activity, and the health effects of exercise and physical activity. The scientific findings and applications that led to the emergence of the field of physical activity and public health are also examined. Students will come away with a greater understanding of how experts from both fields can work together to advance the use of physical activity for the prevention and treatment of chronic disease and other health issues. Foundations of Physical Activity and Public

Health describes how physical activity improves health, including cardiorespiratory and metabolic diseases, overweight and obesity, musculoskeletal disorders, cancers, and mental health. Data on the prevalence and economic costs are presented to demonstrate the scope of the health issues and the importance of addressing them. Information on common testing methods, evidence on the benefits of physical activity, and recommendations for physical activity will give readers the background knowledge for promoting physical activity as a means of improving health. The health risks associated with physical activity are also discussed. Information on the prevalence of problems, the adaptive processes that can help prevent injury, and minimizing risks will prepare students to consider and address safety concerns. The text examines evidence-based strategies for increasing physical activity in individuals and populations using three general approaches: informational, behavioral and social, and environmental and policy. Examples of successful programs from various settings, including community-wide and school-based interventions, help students understand how to apply the theory to practice. Students also learn the concepts of evaluation of physical activity programs as well as logic models, evaluation designs, data collection, and analysis. In addition, building effective partnerships for physical activity programs is discussed alongside real-world initiatives such as the state plan Active Texas 2020, the U.S. National Physical Activity Plan, and the Toronto Charter for Physical Activity. Strategies and models for physical activity advocacy are also

addressed. The text features a wealth of pedagogical aids that will enhance students' learning experience. Chapter-opening summaries and question lists detail key concepts to focus on, case studies and callout boxes provide real-world examples that tie theory to practice, and Key Leader Profile sidebars allow students to explore career options while learning more about individuals who have had a major impact on this emerging field. Each chapter ends with a review of the most important ideas covered, key terms, and study questions that will help students test their recall and develop their understanding of the material. Full bibliographies are provided as well as valuable online resource lists in the E-Media sections. For instructors, ancillaries are available to assist in teaching their courses. Foundations of Physical Activity and Public Health is also an asset to new professionals as well as those preparing for the ACSM/NPAS Physical Activity in Public Health Specialist certification exam. The text addresses the core competencies put forth by NPAS—including partnership development, planning and evaluation, development of effective interventions, and evaluation of scientific data—and is cross-referenced at the end of each chapter for easy review. As the emphasis on physical activity as a tool for improving public health grows, the expertise of professionals with the combined knowledge and skills from both the public health science and exercise science fields will be highly sought. Foundations of Physical Activity and Public Health will help students obtain an overview of the kinesiology and public health areas, understand physical

activity applications for public health, learn about career options, and inspire them to choose a career in the emerging field of physical activity and public health.

The age of Western hegemony is over. Whether or not America itself declines or thrives under President Trump's leadership, the post-war liberal international order underpinned by US military, economic and ideological primacy and supported by global institutions serving its power and purpose, is coming to an end. But what will take its place? A Chinese world order? A re-constituted form of American hegemony? A regionalized system of global cooperation, including major and emerging powers? In this updated and extended edition of his widely acclaimed book, Amitav Acharya offers an incisive answer to this fundamental question. While the US will remain a major force in world affairs, he argues that it has lost the ability to shape world order after its own interests and image. As a result, the US will be one of a number of anchors including emerging powers, regional forces, and a concert of the old and new powers shaping a new world order. Rejecting labels such as multipolar, apolar, or G-Zero, Acharya likens the emerging system to a multiplex theatre, offering a choice of plots (ideas), directors (power), and action (leadership) under one roof. Finally, he reflects on the policies that the US, emerging powers and regional actors must pursue to promote stability in this decentred but interdependent, multiplex world.

Written by a leading scholar of the international relations of the non-Western world, and rising above partisan punditry, this book represents a major contribution to debates over the post-American era.
Preceded by Magnetic resonance imaging: physical principles and sequence design / E. Mark Haacke ... [et al.]. c1999.
Now in an updated edition with fresh perspectives on high-profile ethical issues such as torture and same-sex marriage, this collection pairs cogently argued essays by leading philosophers with opposing views on fault-line public concerns. Revised and updated new edition with six new pairs of essays on prominent contemporary issues including torture and same-sex marriage, and a survey of theories of ethics by Stephen Darwall Leading philosophers tackle colleagues with opposing views in contrasting essays on core issues in applied ethics An ideal semester-length course text certain to generate vigorous discussion
This exciting sequel to John Child's classic text, Organization, provides a current, comprehensive guide to organizational management in today's world, with additional teaching website supports. Written in an approachable style, and featuring new international examples, this is a major contemporary guide to the role of organizations and people in business success. A revealing account of new internal organizational forms and the evolution of

organization to meet new demands Makes state-of-the-art principles and practice available to students and practitioners Covers a broad range of topics, from integration, control, reward policies, outsourcing, flexibility and strategic alliances, to trust, learning, and corporate governance Draws upon recent research and good business journalism Features new international examples Each chapter contains summaries of key points, lists of practical guidelines, questions for discussion, and suggestions for further reading Fully supported by web-based Instructor Manual with teacher notes and powerpoint slides; visit www.blackwellpublishing.com/child

Presenting a succinct, historically informed introduction to North and South Korea, the second edition of The Koreas considers the radically different ways these countries have dealt with the growing challenges of globalization. Since the first edition's publication, the economic, political, and social differences have only intensified, making evident the relevancy and importance of Armstrong's work, in understanding the Koreas now and in the future. Ultimately, The Koreas is a crisp, engaging primer of Korea and the Korean people in the contemporary world. This book is ideal for many courses in a variety of disciplines, including politics, history, international business, and Asian studies.

Software Engineering: A Methodical Approach

(Second Edition) provides a comprehensive, but concise introduction to software engineering. It adopts a methodical approach to solving software engineering problems, proven over several years of teaching, with outstanding results. The book covers concepts, principles, design, construction, implementation, and management issues of software engineering. Each chapter is organized systematically into brief, reader-friendly sections, with itemization of the important points to be remembered. Diagrams and illustrations also sum up the salient points to enhance learning. Additionally, the book includes the author's original methodologies that add clarity and creativity to the software engineering experience. New in the Second Edition are chapters on software engineering projects, management support systems, software engineering frameworks and patterns as a significant building block for the design and construction of contemporary software systems, and emerging software engineering frontiers. The text starts with an introduction of software engineering and the role of the software engineer. The following chapters examine in-depth software analysis, design, development, implementation, and management. Covering object-oriented methodologies and the principles of object-oriented information engineering, the book reinforces an object-oriented approach to the early phases of the software development life

cycle. It covers various diagramming techniques and emphasizes object classification and object behavior. The text features comprehensive treatments of: Project management aids that are commonly used in software engineering An overview of the software design phase, including a discussion of the software design process, design strategies, architectural design, interface design, database design, and design and development standards User interface design Operations design Design considerations including system catalog, product documentation, user message management, design for real-time software, design for reuse, system security, and the agile effect Human resource management from a software engineering perspective Software economics Software implementation issues that range from operating environments to the marketing of software Software maintenance, legacy systems, and re-engineering This textbook can be used as a one-semester or two-semester course in software engineering, augmented with an appropriate CASE or RAD tool. It emphasizes a practical, methodical approach to software engineering, avoiding an overkill of theoretical calculations where possible. The primary objective is to help students gain a solid grasp of the activities in the software development life cycle to be confident about taking on new software engineering projects.

Leadership, adaptability, value creation. These are the skills necessary for tomorrow's managers. Allen Amason approaches the topic of strategic management with these traits in mind. Rather than simply teaching theory and research, he seeks to communicate to them the fundamental keys to how strategy works. This book is designed to help students think critically and understand fully how to strategically manage their future firms. In so doing, it will enable them to adapt and learn, even as their circumstances change; to apply sound logic and reasoning, even in new and unfamiliar settings. By conveying enduring and fundamental principles of economic and human behavior rather than simply reporting on the latest innovations, this book succeeds in preparing students to excel in the business environment over time, regardless of how it evolves.

Ecological research and the way that ecologists use statistics continues to change rapidly. This second edition of the best-selling Design and Analysis of Ecological Experiments leads these trends with an update of this now-standard reference book, with a discussion of the latest developments in experimental ecology and statistical practice. The goal of this volume is to encourage the correct use of some of the more well known statistical techniques and to make some of the less well known but potentially very useful techniques available.

Chapters from the first edition have been substantially revised and new chapters have been added. Readers are introduced to statistical techniques that may be unfamiliar to many ecologists, including power analysis, logistic regression, randomization tests and empirical Bayesian analysis. In addition, a strong foundation is laid in more established statistical techniques in ecology including exploratory data analysis, spatial statistics, path analysis and meta-analysis. Each technique is presented in the context of resolving an ecological issue. Anyone from graduate students to established research ecologists will find a great deal of new practical and useful information in this current edition.

The SAGE Handbook of Applied Social Research Methods, Second Edition provides students and researchers with the most comprehensive resource covering core methods, research designs, and data collection, management, and analysis issues. This thoroughly revised edition continues to place critical emphasis on finding the tools that best fit the research question given the constraints of deadlines, budget, and available staff. Each chapter offers key guidance on how to make intelligent and conscious tradeoffs so that one can refine and hone the research question as new knowledge is gained, unanticipated obstacles are encountered, or contextual shifts take place - all key elements in the

iterative nature of applied research. Each chapter has been enhanced pedagogically to include more step-by-step procedures, specific, rich yet practical examples from various settings to illustrate the method, parameters to define when the method is most appropriate and when it is not appropriate, and greater use of visual aids (graphs, models, tip boxes) to provide teaching and learning tools. - twenty core chapters written by research experts that cover major methods and data analysis issues across the social and behavioral sciences, education, and management; - emphasis on applying research techniques, particularly in "real-world" settings in which there are various data, money, time, and political constraints; - new chapters on mixed methods, qualitative comparative analysis, concept mapping, and internet data collection; - a newly developed section that serves as a guide for students who are navigating through the book and attempting to translate the chapters into action; - a new Instructor's Resources CD, with relevant journal articles, test questions, and exercises to aid the instructor in developing appropriate course materials.

Updated with modern coverage, a streamlined presentation, and an excellent companion CD, this sixth edition achieves yet again an unmatched balance between theory and application. Authors Charles H. Roth, Jr. and Larry L. Kinney carefully

present the theory that is necessary for understanding the fundamental concepts of logic design while not overwhelming students with the mathematics of switching theory. Divided into 20 easy-to-grasp study units, the book covers such fundamental concepts as Boolean algebra, logic gates design, flip-flops, and state machines. By combining flip-flops with networks of logic gates, students will learn to design counters, adders, sequence detectors, and simple digital systems. After covering the basics, this text presents modern design techniques using programmable logic devices and the VHDL hardware description language.

An approach to software design that introduces a fully automated analysis giving designers immediate feedback, now featuring the latest version of the Alloy language. In Software Abstractions Daniel Jackson introduces an approach to software design that draws on traditional formal methods but exploits automated tools to find flaws as early as possible. This approach—which Jackson calls “lightweight formal methods” or “agile modeling”—takes from formal specification the idea of a precise and expressive notation based on a tiny core of simple and robust concepts but replaces conventional analysis based on theorem proving with a fully automated analysis that gives designers immediate feedback. Jackson has developed Alloy, a language that captures the essence of software abstractions

simply and succinctly, using a minimal toolkit of mathematical notions. This revised edition updates the text, examples, and appendixes to be fully compatible with Alloy 4.

Combine traditional techniques with modern media for morecommunicative renderings Digital Drawing for Landscape Architecture: ContemporaryTechniques and Tools for Digital Representation in Site Design,Second Edition bridges the gap between traditional analog andnew digital tools by applying timeless concepts of representationto enhance design work in digital media. The book explores specifictechniques for creating landscape designs, including digitallyrendered plans, perspectives, and diagrams, and the updated secondedition offers expanded coverage of newer concepts and techniques.Readers will gain insight into the roles of different drawings,with a clear emphasis on presenting a solid understanding of howdiagram, plan, section, elevation, and perspective work together topresent a comprehensive design approach. Digital rendering is faster, more efficient, and more flexiblethan traditional rendering techniques, but the design principlesand elements involved are still grounded in hand-renderingtechniques. Digital Drawing for Landscape Architectureexploits both modalities to help designers create more beautiful,accurate, and

communicative drawings in a professional studioenvironment. This second edition contains revised information onplan rendering techniques, camera matching workflow, and colorselection, along with brand new features, like: Time-based imagery and tools Workflow integration techniques Photoshop and Illustrator task automation Over 400 updated images, plus over 50 new examples ofaward-winning work The book takes a tutorial-based approach to digital rendering,allowing readers to start practicing immediately and get up tospeed quickly. Communication is a vital, but often overlookedcomponent of the design process, and designers rely upon theirdrawings to translate concepts from idea to plan. DigitalDrawing for Landscape Architecture provides the guidancelandscape designers need to create their most communicativerenderings yet.

If you keep removing single grains of sand from a heap, when is it no longer a heap? From discussions of the heap paradox in classical Greece, to modern formal approaches like fuzzy logic, Timothy Williamson traces the history of the problem of vagueness. He argues that standard logic and formal semantics apply even to vague languages and defends the controversial, realist view that vagueness is a form of ignorance - there really is a grain of sand whose removal turns a heap into a non-heap, but we can never know exactly which one it is.

Logic is often perceived as having little to do with the rest of philosophy, and even less to do with real life. Graham Priest explores the philosophical roots of the subject, explaining how modern formal logic addresses many issues.

Visual Culture is a primary resource of key statements on photographic meaning, representation and visual culture that draws upon the works of a wide range of influential scholars and thinkers including Barthes, Sontag, Baudrillard and Mulvey.

This text takes the student from the very basics of digital electronics to an introduction of state-of-the-art techniques used in the field. It is ideal for any engineering or science student who wishes to study the subject from its basic principles as well as serving as a guide to more advanced topics for readers already familiar with the subject. The coverage is sufficiently in-depth to allow the reader to progress smoothly onto higher level texts.

Sweet Reason: A Field Guide to Modern Logic, 2nd Edition offers an innovative, friendly, and effective introduction to logic. It integrates formal first order, modal, and non-classical logic with natural language reasoning, analytical writing, critical thinking, set theory, and the philosophy of logic and mathematics.

An innovative introduction to the field of logic designed to entertain as it informs Integrates formal first order, modal, and non-classical logic with natural language reasoning, analytical writing, critical

thinking, set theory, and the philosophy of logic and mathematics Addresses contemporary applications of logic in fields such as computer science and linguistics A web-site (www.wiley.com/go/henle) linked to the text features numerous supplemental exercises and examples, enlightening puzzles and cartoons, and insightful essays

Philosophical Logic is a clear and concise critical survey of nonclassical logics of philosophical interest written by one of the world's leading authorities on the subject. After giving an overview of classical logic, John Burgess introduces five central branches of nonclassical logic (temporal, modal, conditional, relevantistic, and intuitionistic), focusing on the sometimes problematic relationship between formal apparatus and intuitive motivation. Requiring minimal background and arranged to make the more technical material optional, the book offers a choice between an overview and in-depth study, and it balances the philosophical and technical aspects of the subject. The book emphasizes the relationship between models and the traditional goal of logic, the evaluation of arguments, and critically examines apparatus and assumptions that often are taken for granted. Philosophical Logic provides an unusually thorough treatment of conditional logic, unifying probabilistic and model-theoretic approaches. It underscores the variety of approaches that have been taken to relevantistic and related logics, and it

stresses the problem of connecting formal systems to the motivating ideas behind intuitionistic mathematics. Each chapter ends with a brief guide to further reading. Philosophical Logic addresses students new to logic, philosophers working in other areas, and specialists in logic, providing both a sophisticated introduction and a new synthesis.
Fully revised and updated, the second edition of the International Encyclopedia of the Social and Behavioral Sciences, first published in 2001, offers a source of social and behavioral sciences reference material that is broader and deeper than any other. Available in both print and online editions, it comprises over 3,900 articles, commissioned by 71 Section Editors, and includes 90,000 bibliographic references as well as comprehensive name and subject indexes. Provides authoritative, foundational, interdisciplinary knowledge across the wide range of behavioral and social sciences fields Discusses history, current trends and future directions Topics are cross-referenced with related topics and each article highlights further reading
Leading graphene research theorist Mikhail I. Katsnelson systematically presents the basic concepts of graphene physics in this fully revised second edition. The author illustrates and explains basic concepts such as Berry phase, scaling, Zitterbewegung, Kubo, Landauer and Mori formalisms in quantum kinetics, chirality, plasmons,

commensurate-incommensurate transitions and many others. Open issues and unsolved problems introduce the reader to the latest developments in the field. New achievements and topics presented include the basic concepts of Van der Waals heterostructures, many-body physics of graphene, electronic optics of Dirac electrons, hydrodynamics of electron liquid and the mechanical properties of one atom-thick membranes. Building on an undergraduate-level knowledge of quantum and statistical physics and solid-state theory, this is an important graduate textbook for students in nanoscience, nanotechnology and condensed matter. For physicists and material scientists working in related areas, this is an excellent introduction to the fast-growing field of graphene science.
Although the complexity of designs is necessitating powerful abstractions, the fundamentals remain unchanged. The contemporary digital designer must have a much broader understanding of the discipline of computation, including both hardware and software. Presenting this perspective, this second edition offers a modern introduction to logic design.
The second edition of The Handbook of Contemporary Semantic Theory presents a comprehensive introduction to cutting-edge research in contemporary theoretical and computational semantics. Features completely new content from the first edition of The Handbook of Contemporary

Semantic Theory Features contributions by leading semanticists, who introduce core areas of contemporary semantic research, while discussing current research Suitable for graduate students for courses in semantic theory and for advanced researchers as an introduction to current theoretical work

Object technology pioneer Wirfs-Brock teams with expert McKean to present a thoroughly updated, modern, and proven method for the design of software. The book is packed with practical design techniques that enable the practitioner to get the job done.