

## *Invitation To Computer Science 6th Edition*

As a result of the incorporation of computer software into countless commercial and industrial products, the patentability of software has become a vital issue in intellectual property law. This indispensable book provides an overview on the current status of computer-implemented inventions in patent law across Europe and major jurisdictions worldwide. A hugely practical field research tool with guidance based on case law, it examines the major hurdles in each particular country and describes the best practice to be adopted. Clearly showing how enforceable software patent applications can be competitively drafted and how a patent portfolio for computer-implemented inventions can be established in several countries without spending money unnecessarily on problematic examination proceedings, this book covers such issues and topics as the following: • claim categories for patent applications; • sufficient level of abstraction/breadth of the claimed invention; • fundamental terms of computing and terminological traps; • probability for patents dependent on software application areas; and • patents in core areas of computing. With separate chapters for the key countries, Germany, the United Kingdom, France, the United States, China, Korea, Japan, India, and the European Patent Office the legal situation for computer-implemented inventions in each country or region, this book includes guidance on prosecution under national law, analyses of relevant court decisions, practice checklists, and an outlook on future developments.. The authors describe claim formulation based on actual cases and on principles of computer science in order to show what might be or might not be patentable in each jurisdiction. With this incomparable resource, patent attorneys and patent professionals in companies will get a basis for making decisions about the most appropriate jurisdictions in which to file patent applications. This book will also be of great value to computer professionals who are affected by the protection of software or who are actively involved in the protection of software by patent law.

Invitation to Computer Science Cengage Learning

YOU ARE CORDIALLY INVITED TO TAKE YOUR NEXT STEP Do you believe there's more to life - and just aren't sure how to move forward? Are you feeling stuck or facing a challenge - and don't know what to do about it? Do you have a big dream - but nay-sayers are telling you, "It'll never work"? Are you ready for a new adventure - and would love to know what that looks like? If you said yes to any of the questions above, you've come to the right source for answers that will help you transform your life, starting today. With her trademark combination of humor and wisdom, life balance expert and frequent Oprah guest Mary LoVerde will help you shine a light on what is holding you back. She'll challenge you to face the reasons why, and then offer you an abundance of valuable lessons to help you lead the life you want now ... not someday. Are you ready to quit what's not working and kick-start what does? If so, take your next step and say yes to The Invitation. Mary LoVerde is an internationally acclaimed Hall of Fame speaker and the author of three best-selling books: "I Used to Have a Handle on Life but It Broke," "Stop Screaming at the Microwave" and "Touching Tomorrow." [www.maryloverde.com](http://www.maryloverde.com)

Note: This is the 3rd edition. If you need the 2nd edition for a course you are taking, it can be found as a "other format" on amazon, or by searching its isbn: 1534970746 This gentle introduction to discrete mathematics is written for first and second year math majors, especially those who intend to teach. The text began as a set of lecture notes for the discrete mathematics course at the University of Northern Colorado. This course serves both as an introduction to topics in discrete math and as the "introduction to proof" course for math majors. The course is usually taught with a large amount of student inquiry, and this text is written to help facilitate this. Four main topics are covered: counting, sequences, logic, and graph theory. Along the way proofs are introduced, including proofs by contradiction, proofs by induction, and combinatorial proofs. The book contains over 470 exercises, including 275 with solutions and over 100 with hints. There are also Investigate! activities throughout the text to support active, inquiry based learning. While there are many fine discrete math textbooks available, this text has the following advantages: It is written to be used in an inquiry rich course. It is written to be used in a course for future math teachers. It is open source, with low cost print editions and free electronic editions. This third edition brings improved exposition, a new section on trees, and a bunch of new and improved exercises. For a complete list of changes, and to view the free electronic version of the text, visit the book's website at [discrete.openmathbooks.org](http://discrete.openmathbooks.org)

An Introduction to Language and Linguistics

Researching Internet Governance

**Invitation to Computer Science + Mindtap Computer Science, 1-term, 6 Months Printed Access Card**

**An Invitation to Computer Science**

**From Bits and Gates to C and Beyond**

**Invitation to Computer Science**

#1 NEW YORK TIMES BESTSELLER • ONE OF TIME MAGAZINE'S 100 BEST YA BOOKS OF ALL TIME The extraordinary, beloved novel about the ability of books to feed the soul even in the darkest of times. When Death has a story to tell, you listen. It is 1939. Nazi Germany. The country is holding its breath. Death has never been busier, and will become busier still. Liesel Meminger is a foster girl living outside of Munich, who scratches out a meager existence for herself by stealing when she encounters something she can't resist—books. With the help of her accordion-playing foster father, she learns to read and shares her stolen books with her neighbors during bombing raids as well as with the Jewish man hidden in her basement. In superbly crafted writing that burns with intensity, award-winning author Markus Zusak, author of *I Am the Messenger*, has given us one of the most enduring stories of our time. "The kind of book that can be life-changing." —The New York Times "Deserves a place on the same shelf with *The Diary of a Young Girl* by Anne Frank." —USA Today **DON'T MISS BRIDGE OF CLAY, MARKUS ZUSAK'S FIRST NOVEL SINCE THE BOOK THIEF.**

Learn C# programming from scratch using Unity as a fun and accessible entry point with this updated edition of the bestselling series Includes invitation to join the online Unity Game Development community to read the book alongside peers, Unity developers/C# programmers and Harrison Ferrone Key Features Learn C# programming basics, terminology, and coding best practices Become confident with Unity fundamentals and features in line with Unity 2021 Apply your C# knowledge in practice and build a working first-person shooter game prototype in Unity Book Description The Learning C# by Developing Games with Unity series has established itself as a popular choice for getting up to speed with C#, a powerful and versatile programming language with a wide array of applications in various domains. This bestselling franchise presents a clear path for learning C# programming from the ground up through the world of Unity game development. This sixth edition has been updated to introduce modern C# features with Unity 2021. A new chapter has also been added that covers reading and writing binary data from files, which will help you become proficient in handling errors and asynchronous operations. The book acquaints you with the core concepts of programming in C#, including variables, classes, and object-oriented programming. You will explore the fundamentals of Unity game development, including game design, lighting basics, player movement, camera controls, and collisions. You will write C# scripts for simple game mechanics, perform procedural programming, and add complexity to your games by introducing smart enemies and damage-causing projectiles. By the end of the book, you will have developed the skills to become proficient in C# programming and built a playable game prototype with the Unity game engine. What you will learn Follow simple steps and examples to create and implement C# scripts in Unity Develop a 3D mindset to build games that come to life Create basic game mechanics such as player controllers and shooting projectiles using C# Divide your code into pluggable building blocks using interfaces, abstract classes, and class extensions Become familiar with stacks, queues, exceptions, error handling, and other core C# concepts Learn how to handle text, XML, and JSON data to save and load your game data Explore the basics of AI for games and implement them to control enemy behavior Who this book is for If you're a developer, programmer, hobbyist, or anyone who wants to get started with Unity and C# programming in a fun and engaging manner, this book is for you. You'll still be able to follow along if you don't have programming experience, but knowing the basics will help you get the most out of this book.

In this best-selling text, Mike Schneider and Judy Gersting unify and lend relevance to the topics of computer science within their proven framework of a six-layer hierarchy of abstractions. The authors begin by showing that computer science is the study of algorithms, which is the central theme of the book, then move up the next five levels of the hierarchy: hardware, virtual machine, software, applications, and ethics. Each layer in the hierarchy builds upon the ideas and concepts presented in earlier chapters. In addition to some motivational applications such as Web page design and interactive graphics, the book covers the fundamental issues of algorithms, hardware design, computer organization, system software, language models, theory of computation, and social and ethical issues of computing. Exposure to these deeper and more complex core ideas introduces students to the richness and beauty of the field and helps them appreciate the principles behind their creation and implementation. While feeling the excitement of

computer science, students receive a solid grounding in the central concepts as well as in important uses of computing and information technology.

Introduction to Computing Systems: From bits & gates to C & beyond, now in its second edition, is designed to give students a better understanding of computing early in their college careers in order to give them a stronger foundation for later courses. The book is in two parts: (a) the underlying structure of a computer, and (b) programming in a high level language and programming methodology. To understand the computer, the authors introduce the LC-3 and provide the LC-3 Simulator to give students hands-on access for testing what they learn. To develop their understanding of programming and programming methodology, they use the C programming language. The book takes a "motivated" bottom-up approach, where the students first get exposed to the big picture and then start at the bottom and build their knowledge bottom-up. Within each smaller unit, the same motivated bottom-up approach is followed. Every step of the way, students learn new things, building on what they already know. The authors feel that this approach encourages deeper understanding and downplays the need for memorizing. Students develop a greater breadth of understanding, since they see how the various parts of the computer fit together.

Introduction to Probability

Transforming the Workforce for Children Birth Through Age 8

Algorithm Design

An Overview

The Invitation

The Computer Science of Human Decisions

This accessible textbook is the only introduction to linguistics in which each chapter is written by an expert who teaches courses on that topic, ensuring balanced and uniformly excellent coverage of the full range of modern linguistics. Assuming no prior knowledge the text offers a clear introduction to the traditional topics of structural linguistics (theories of sound, form, meaning, and language change), and in addition provides full coverage of contextual linguistics, including separate chapters on discourse, dialect variation, language and culture, and the politics of language. There are also up-to-date separate chapters on language and the brain, computational linguistics, writing, child language acquisition, and second-language learning. The breadth of the textbook makes it ideal for introductory courses on language and linguistics offered by departments of English, sociology, anthropology, and communications, as well as by linguistics departments.

" This is not only the best environmental sociology text I ' ve used, but it is the best text of any type I ' ve used in college-level teaching. " –Dr. Cliff Brown, University of New Hampshire Join author Mike Bell and new co-author Loka Ashwood as they explore " the biggest community of all " and bring out the sociology of environmental possibility. The highly-anticipated Fifth Edition of An Invitation to Environmental Sociology delves into this rapidly changing and growing field in a clear and artful manner. Written in a lively, engaging style, this book explores the broad range of topics in environmental sociology with a personal passion rarely seen in sociology books. The Fifth Edition contains new chapters entitled " Money and Markets, " " Technology and Science, " and " Living in An Ecological Society. " In addition, this edition brings in fresh material on extraction between core and periphery countries, the industrialization of agriculture, the hazards of fossil fuel production, environmental security, and making environmentalism normal.

This book constitutes the refereed post-conference proceedings of the 6th European Conference on Information Literacy, ECIL 2018, held in Oulu, Finland, in September 2018. The 58 revised papers included in this volume were carefully reviewed and selected from 241 submissions. The papers cover a wide range of topics in the field of information literacy and focus on information literacy in everyday life. They are organized in the following topical sections: information literacy in different contexts of everyday life; information literacy, active citizenship and community engagement; information literacy, health and well-being; workplace information literacy and employability; information literacy research and information literacy in theoretical context; information seeking and information behavior; information literacy for different groups in different cultures and countries; information literacy for different groups in different cultures and countries; information literacy instruction; information literacy and aspects of education; data literacy and reserach data management; copyright literacy; information literacy and lifelong learning.

Through lively writing and stimulating examples, authors Carole Wade and Carol Tavris invite readers to actively explore the field of psychology and the fundamentals of critical and scientific thinking. "Invitation to Psychology" presents the science of psychology according to six areas of the learner's experience: Your Self, Your Body, Your Mind, Your Environment, Your Mental Health and Your Life. This unique organization engages readers from the very beginning and gives them a framework for thinking about human behavior. Incorporating many active learning and critical thinking features, a balance of classic and contemporary research, and thorough integration of the psychology of women and men of all cultures-readers will learn much to take with them. For individuals seeking an introduction to psychology.

An Open Introduction

Legal Protection for Computer-Implemented Inventions

Kickstart your C# programming and Unity journey by building 3D games from scratch, 6th Edition

Java Version

Twenty Lectures on Algorithmic Game Theory

Tangerine

*Computer Science: An Overview uses broad coverage and clear exposition to present a complete picture of the dynamic computer science field. Accessible to students from all backgrounds, Glenn Brookshear uses a language-independent context to encourage the development of a practical, realistic understanding of the field. An overview of each of the important areas of Computer Science (e.g. Networking, OS, Computer Architecture, Algorithms) provides students with a general level of proficiency for future courses. The Eleventh Edition features two new contributing authors (David Smith — Indiana University of PA; Dennis Brylow — Marquette University), new, modern examples, and updated coverage based on current technology.*

*Strengthen family and community engagement to promote equity and increase student success! When schools, families, and*

*communities collaborate and share responsibility for students' education, more students succeed in school. Based on 30 years of research and fieldwork, this fourth edition of a bestseller provides tools and guidelines to use to develop more effective and equitable programs of family and community engagement. Written by a team of well-known experts, this foundational text demonstrates a proven approach to implement and sustain inclusive, goal-oriented programs. Readers will find: Many examples and vignettes Rubrics and checklists for implementation of plans CD-ROM complete with slides and notes for workshop presentations*

*This guide offers students an overview of computer science principles, and provides a solid foundation for those continuing their study in this dynamic and exciting discipline. New features of this edition include: a chapter on computer security providing readers with the latest information on preventing unauthorized access; types of malware and anti-virus software; protecting online information, including data collection issues with Facebook, Google, etc.; security issues with mobile and portable devices; a new section on cloud computing offering readers an overview of the latest way in which businesses and users interact with computers and mobile devices; a rewritten section on social networks including new data on Google+ and Facebook; updates to include HTML5; revised and updated Did You Know callouts are included in the chapter margins; revisions of recommendations by the ACM dealing with computer ethic issues. --*

*Scholars from a range of disciplines discuss research methods, theories, and conceptual approaches in the study of internet governance. The design and governance of the internet has become one of the most pressing geopolitical issues of our era. The stability of the economy, democracy, and the public sphere are wholly dependent on the stability and security of the internet. Revelations about election hacking, facial recognition technology, and government surveillance have gotten the public's attention and made clear the need for scholarly research that examines internet governance both empirically and conceptually. In this volume, scholars from a range of disciplines consider research methods, theories, and conceptual approaches in the study of internet governance.*

*Scholar's Invitation To Computer Science 6*

*A Unifying Foundation*

*6th European Conference, ECIL 2018, Oulu, Finland, September 24-27, 2018, Revised Selected Papers*

*Invitation to Computer Science + Lms Integrated for Mindtap Computing, 1 Term 6 Months Access Card*

*Invitation to the Life Span*

*Invitation to Psychology*

Children are already learning at birth, and they develop and learn at a rapid pace in their early years. This provides a critical foundation for lifelong progress, and the adults who provide for the care and the education of young children bear a great responsibility for their health, development, and learning. Despite the fact that they share the same objective - to nurture young children and secure their future success - the various practitioners who contribute to the care and the education of children from birth through age 8 are not acknowledged as a workforce unified by the common knowledge and competencies needed to do their jobs well. Transforming the Workforce for Children Birth Through Age 8 explores the science of child development, particularly looking at implications for the professionals who work with children. This report examines the current capacities and practices of the workforce, the settings in which they work, the policies and infrastructure that set qualifications and provide professional learning, and the government agencies and other funders who support and oversee these systems. This book then makes recommendations to improve the quality of professional practice and the practice environment for care and education professionals. These detailed recommendations create a blueprint for action that builds on a unifying foundation of child development and early learning, shared knowledge and competencies for care and education professionals, and principles for effective professional learning. Young children thrive and learn best when they have secure, positive relationships with adults who are knowledgeable about how to support their development and learning and are responsive to their individual progress.

Transforming the Workforce for Children Birth Through Age 8 offers guidance on system changes to improve the quality of professional practice, specific actions to improve professional learning systems and workforce development, and research to continue to build the knowledge base in ways that will directly advance and inform future actions. The recommendations of this book provide an opportunity to improve the quality of the care and the education that children receive, and ultimately improve outcomes for children.

Big Java: Early Objects, 7th Edition focuses on the essentials of effective learning and is suitable for a two-semester introduction to programming sequence. This text requires no prior programming experience and only a modest amount of high school algebra. Objects and classes from the standard library are used where appropriate in early sections with coverage on object-oriented design starting in Chapter 8. This gradual approach allows students to use objects throughout their study of the core algorithmic topics, without teaching bad habits that must be un-learned later. The second half covers algorithms and data structures at a level suitable for beginning students. Choosing the enhanced eText format allows students to develop their coding skills using targeted, progressive interactivities designed to integrate with the eText. All sections include built-in activities, open-ended review exercises, programming exercises, and projects to help students practice programming and build confidence. These activities go far beyond simplistic multiple-choice questions and animations. They have been designed to guide students along a learning path for mastering the complexities of programming. Students demonstrate comprehension of programming structures, then practice programming with simple steps in scaffolded settings, and finally write complete, automatically graded programs. The perpetual access VitalSource Enhanced eText, when integrated with your school's learning management system, provides the capability to monitor student progress in VitalSource SCORECenter and track grades for homework or participation. \*Enhanced eText and interactive functionality available through select vendors and may require LMS integration approval for SCORECenter.

Interested in the Genetic Algorithm? Simulated Annealing? Ant Colony Optimization? Essentials of Metaheuristics covers these and other metaheuristics algorithms, and is intended for undergraduate students, programmers, and non-experts. The book covers a wide range of algorithms, representations, selection and modification operators,

and related topics, and includes 71 figures and 135 algorithms great and small. Algorithms include: Gradient Ascent techniques, Hill-Climbing variants, Simulated Annealing, Tabu Search variants, Iterated Local Search, Evolution Strategies, the Genetic Algorithm, the Steady-State Genetic Algorithm, Differential Evolution, Particle Swarm Optimization, Genetic Programming variants, One- and Two-Population Competitive Coevolution, N-Population Cooperative Coevolution, Implicit Fitness Sharing, Deterministic Crowding, NSGA-II, SPEA2, GRASP, Ant Colony Optimization variants, Guided Local Search, LEM, PBIL, UMDA, cGA, BOA, SAMUEL, ZCS, XCS, and XCSF. Because of its inherent simplicity, graph theory has a wide range of applications in engineering, and in physical sciences. It has of course uses in social sciences, in linguistics and in numerous other areas. In fact, a graph can be used to represent almost any physical situation involving discrete objects and the relationship among them. Now with the solutions to engineering and other problems becoming so complex leading to larger graphs, it is virtually difficult to analyze without the use of computers. This book is recommended in IIT Kharagpur, West Bengal for B.Tech Computer Science, NIT Arunachal Pradesh, NIT Nagaland, NIT Agartala, NIT Silchar, Gauhati University, Dibrugarh University, North Eastern Regional Institute of Management, Assam Engineering College, West Bengal University of Technology (WBUT) for B.Tech, M.Tech Computer Science, University of Burdwan, West Bengal for B.Tech. Computer Science, Jadavpur University, West Bengal for M.Sc. Computer Science, Kalyani College of Engineering, West Bengal for B.Tech. Computer Science. Key Features: This book provides a rigorous yet informal treatment of graph theory with an emphasis on computational aspects of graph theory and graph-theoretic algorithms. Numerous applications to actual engineering problems are incorporated with software design and optimization topics.

Information Literacy in Everyday Life

Essentials of Metaheuristics (Second Edition)

An Invitation to Environmental Sociology

A Practical Guide to Software-Related Patents

School, Family, and Community Partnerships

Learning C# by Developing Games with Unity 2021

**Twelve-year-old Paul, who lives in the shadow of his football hero brother Erik, fights for the right to play soccer despite his near blindness and slowly begins to remember the incident that damaged his eyesight. An ALA Best Book for Young Adults. Reprint. Jr Lib Guild.**

**Understanding Computers in a Changing Society** gives your students a classic introduction to computer concepts with a modern twist! Known for its emphasis on basic computer concepts and societal issues, this text makes concepts relevant to today's career-focused students. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Computer science and economics have engaged in a lively interaction over the past fifteen years, resulting in the new field of algorithmic game theory. Many problems that are central to modern computer science, ranging from resource allocation in large networks to online advertising, involve interactions between multiple self-interested parties. Economics and game theory offer a host of useful models and definitions to reason about such problems. The flow of ideas also travels in the other direction, and concepts from computer science are increasingly important in economics. This book grew out of the author's Stanford University course on algorithmic game theory, and aims to give students and other newcomers a quick and accessible introduction to many of the most important concepts in the field. The book also includes case studies on online advertising, wireless spectrum auctions, kidney exchange, and network management.

A fascinating exploration of how insights from computer algorithms can be applied to our everyday lives, helping to solve common decision-making problems and illuminate the workings of the human mind All our lives are constrained by limited space and time, limits that give rise to a particular set of problems. What should we do, or leave undone, in a day or a lifetime? How much messiness should we accept? What balance of new activities and familiar favorites is the most fulfilling? These may seem like uniquely human quandaries, but they are not: computers, too, face the same constraints, so computer scientists have been grappling with their version of such issues for decades. And the solutions they've found have much to teach us. In a dazzlingly interdisciplinary work, acclaimed author Brian Christian and cognitive scientist Tom Griffiths show how the algorithms used by computers can also untangle very human questions. They explain how to have better hunches and when to leave things to chance, how to deal with overwhelming choices and how best to connect with others. From finding a spouse to finding a parking spot, from organizing one's inbox to understanding the workings of memory, *Algorithms to Live By* transforms the wisdom of computer science into strategies for human living.

Discrete Mathematics

Invitation to Computer Science + Mindtap Computing, 1 Term 6 Months Printed Access Card

Algorithms to Live By

Handbook of Research on Social Dimensions of Semantic Technologies and Web Services

The Book Thief

Moving Students of Color from Consumers to Producers of Technology

In recent years, diversity in learning environments has become a pivotal topic of conversation for educators. By enhancing underrepresented students' computational thinking skills, it creates more room for future career opportunities. *Moving Students of Color from Consumers to Producers of Technology* is a comprehensive reference source that provides innovative perspectives on the need for diversity in computer science and engineering disciplines and examines best practices to build upon students' knowledge bases. Featuring coverage on an expansive number of topics and perspectives, such as, computational algorithmic thinking, STEM diversity, and distributed mentorship, this publication is ideally designed for academicians, researchers, and students interested in efforts to broaden participation in computer science careers fields for underrepresented students. *INVITATION TO COMPUTER SCIENCE* is a well-respected text that provides an overview of the computer science field. Using a flexible, non-language specific model, *INVITATION TO COMPUTER SCIENCE* offers a solid foundation for the first course in a Computer Science curriculum. *INVITATION TO COMPUTER SCIENCE, 6TH EDITION* maintains its bestselling, algorithm-driven approach and includes expanded chapter exercises and practice problems, new material on topics such as multicore and parallel

systems, cloud computing, wireless communications, embedded computing, agile software development, emerging programming languages (Go and F#), and new models of e-commerce, as well as boxes dedicated to current issues throughout. Online language modules are available in C++, Java, Python, C#, and Ada, allowing the option of incorporating a programming language to expand concepts from the text. INVITATION TO COMPUTER SCIENCE offers an optional CourseMate with study tools such as flashcards, quizzing, and games. CourseMate Activities speak to and engage students while developing abstract thinking and problem solving skills. Also available with INVITATION TO COMPUTER SCIENCE, an optional online Lab Manual containing 20 laboratory projects that map directly to the main text. The Lab Manual and accompanying software provide both visual and hands-on activities, allowing students to experience the fundamentals of computer science. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Artificial intelligence (AI) is a field within computer science that is attempting to build enhanced intelligence into computer systems. This book traces the history of the subject, from the early dreams of eighteenth-century (and earlier) pioneers to the more successful work of today's AI engineers. AI is becoming more and more a part of everyone's life. The technology is already embedded in face-recognizing cameras, speech-recognition software, Internet search engines, and health-care robots, among other applications. The book's many diagrams and easy-to-understand descriptions of AI programs will help the casual reader gain an understanding of how these and other AI systems actually work. Its thorough (but unobtrusive) end-of-chapter notes containing citations to important source materials will be of great use to AI scholars and researchers. This book promises to be the definitive history of a field that has captivated the imaginations of scientists, philosophers, and writers for centuries.

"This book discusses the new technologies of semantic Web, transforming the way we use information and knowledge"--Provided by publisher.

The Quest for Artificial Intelligence  
Computer Science Illuminated  
Introduction to Computing Systems  
Methods, Frameworks, Futures  
Invitation To Computer Science 4/e  
Computer Science

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound 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. August 6, 2009 Author, Jon Kleinberg, was recently cited in the New York Times for his statistical analysis research in the Internet age.

This text is designed for an introductory probability course at the university level for sophomores, juniors, and seniors in mathematics, physical and social sciences, engineering, and computer science. It presents a thorough treatment of ideas and techniques necessary for a firm understanding of the subject. The text is also recommended for use in discrete probability courses. The material is organized so that the discrete and continuous probability discussions are presented in a separate, but parallel, manner. This organization does not emphasize an overly rigorous or formal view of probability and therefore offers some strong pedagogical value. Hence, the discrete discussions can sometimes serve to motivate the more abstract continuous probability discussions. Features: Key ideas are developed in a somewhat leisurely style, providing a variety of interesting applications to probability and showing some nonintuitive ideas. Over 600 exercises provide the opportunity for practicing skills and developing a sound understanding of ideas. Numerous historical comments deal with the development of discrete probability. The text includes many computer programs that illustrate the algorithms or the methods of computation for important problems. The book is a beautiful introduction to probability theory at the beginning level. The book contains a lot of examples and an easy development of theory without any sacrifice of rigor, keeping the abstraction to a minimal level. It is indeed a valuable addition to the study of probability theory. --Zentralblatt MATH

Now updated to include the most recent developments in Web and network technology, this best-selling introduction to computer science provides a breadth-first overview of the full range of topics in this dynamic discipline: algorithms, hardware design, computer organization, system software, language models, programming, compilation, theory of computation, applications, networks, artificial intelligence, and the impact of computers on society. The authors present these topics in the context of a big picture, - six-layer hierarchy of abstractions - starting with the algorithmic foundations of computer science, and working upward from low-level hardware concepts through virtual machine environments, languages, software, and applications programs to the social issues raised by computer technology. Each layer in the hierarchy builds on ideas and concepts presented earlier. An accompanying lab manual provides exploratory lab experiences tied to the text material. The Second Edition features the use of C++ for teaching the basics of programming, with a C++ compiler provided with the accompanying lab manual. This compiler includes a graphics library that students use to create shapes and images as part of a new section in Chapter 7 on "Graphical Programming."

Big Java

C++ Version

Invitation to Computer Science + Coursemate, 1 Term 6 Months Access Card

Understanding Computers in a Changing Society

Graph Theory with Applications to Engineering and Computer Science

Invitation to Computer Science + Mindtap Computing, 1 Term 6 Months Access Card