

Computer Networking 4th Edition Solution

Satellite networking is an exciting and expanding field that has evolved significantly since the launch of the first telecommunications satellite, from telephone and broadcast to broadband ATM and Internet. With increasing bandwidth and mobility demands on the horizon, satellites have become an integral part of the Global Network Infrastructure (GNI). Satellite Networking: Principles and Protocols provides a balanced coverage of satellite topics from a network point of view, focusing on network aspects, services and applications, quality of service (QoS) and principles and protocols. Introduces the basics of ATM and internet protocols, and characteristics of satellite networks and internetworking between satellite and terrestrial networks Discusses the real-time protocols including RTP, RTCP and SIP for real-time applications such as VoIP and MMC Coverage of new services and applications, internet traffic engineering and MPLS Examines IPv6 over satellite using tunnelling and translation techniques, evolution of earth stations, user terminals and network protocols, and development of satellite networking Includes a Companion Website featuring: Solutions manual, and electronic versions of the figures This text is essential reading for senior undergraduates, postgraduates, and researchers in the fields of satellites, communications and networks. It will also have instant appeal to engineers, managers and operators in these fields.

Mobile computing is rapidly becoming a way of life. This is the fastest emerging field, which has created a need for new techniques and solutions. To fulfill need of the hour, this book is designed for graduate and postgraduate students in B. Tech. computer science & Information Technology, computer applications, research scholars and for professionals.

In its 4th edition, this book remains focused on increasing public awareness of the nature and motives of cyber vandalism and cybercriminals, the weaknesses inherent in cyberspace infrastructure, and the means available to protect ourselves and our society. This new edition aims to integrate security education and awareness with discussions of morality and ethics. The reader will gain an understanding of how the security of information in general and of computer networks in particular, on which our national critical infrastructure and, indeed, our lives depend, is based squarely on the individuals who build the hardware and design and develop the software that run the networks that store our vital information. Addressing security issues with ever-growing social networks are two new chapters: " Security of Mobile Systems " and " Security in the Cloud Infrastructure. " Instructors considering this book for use in a course may request an examination copy here.

The field of Artificial Neural Networks is the fastest growing field in Information Technology and specifically, in Artificial Intelligence and Machine Learning.This must-have compendium presents the theory and case studies of artificial neural networks. The volume, with 4 new chapters, updates the earlier edition by highlighting recent developments in Deep-Learning Neural Networks, which are the recent leading approaches to neural networks. Uniquely, the book also includes case studies of applications of neural networks — demonstrating how such case studies are designed, executed and how their results are obtained.The title is written for a one-

semester graduate or senior-level undergraduate course on artificial neural networks. It is also intended to be a self-study and a reference text for scientists, engineers and for researchers in medicine, finance and data mining.

First International Workshop, WINE 2005, Hong Kong, China, December 15-17, 2005, Proceedings

Next Generation Mobile Networks and Ubiquitous Computing

Law of the Internet, 4th Edition

Tools and Applications

Principles of Information Security

Investigations Into Living Systems, Artificial Life, and Real-world Solutions

"This book gives a general coverage of learning management systems followed by a comparative analysis of the particular LMS products, review of technologies supporting different aspect of educational process, and, the best practices and methodologies for LMS-supported course delivery"--Provided by publisher.

The Critical Importance Of Environmental Preservation Is Apparent To Everyone. The Issues Facing Us Today, Be They Global Warming, The Depleting Ozone Layer, The Controversy Over Nuclear Power, Or The Continuing Problems Of Water Pollution And Solid Waste Disposal, Are Headline News. Environmental Science: Systems And Solutions, Fourth Edition, Offers The Basic Principles Necessary To Understand And Address These Multi-Faceted And Often Very Complex Current Environmental Concerns. The Book Provides A Comprehensive Overview And Synthesis Of Environmental Science And Provides The Basic Factual Data Necessary To Understand The Environment As It Is Today. It Is Important That Students Understand How Various Aspects Of The Natural Environment Interconnect With Each Other And With Human Society. Using A Systems Approach, The Authors Have Organized Complex Information In A Way That Highlights These Connections In A Fair And Unbiased Fashion. A Study Guide Is Incorporated At The End Of Each Chapter To Help Reinforce Concepts And Provide A Clear Overview Of Material.

Success of an organization is increasingly dependent on its capability to create an environment in order to improve productivity of knowledge work. This book focuses on the concepts, models and technologies that are used to design and implement such an environment. It develops the vision of a modular, yet highly integrated enterprise knowledge infrastructure and presents an idealized architecture replete with current technologies and systems. The most important streams of technological development that are covered in the book are communication, collaboration, document and content management, e-learning, enterprise portals, business process management, information life cycle management, information retrieval and visualization, knowledge management, mobile computing, application and network infrastructure, Semantic Web and social software. It includes learning goals, exercises and case examples that help the reader to easily understand and practice the concepts.

Ethics and Technology, 5th Edition, by Herman Tavani introduces students to issues and controversies that comprise the relatively new field of cyberethics. This text examines a wide range of cyberethics issues--from specific issues of moral responsibility that directly affect computer and information technology (IT)

professionals to broader social and ethical concerns that affect each of us in our day-to-day lives. The 5th edition shows how modern day controversies created by emerging technologies can be analyzed from the perspective of standard ethical concepts and theories. -- Provided by publisher.

Communication Challenges and Solutions in the Smart Grid

The Architecture of Computer Hardware, Systems Software, and Networking

Enterprise SOA

The Hardware/Software Interface

Computer Networking

Satellite Networking

Introduction to Computing and Programming in Python, 3e, uses multimedia applications to motivate introductory computer science majors or non-majors. The book's hands-on approach shows how programs can be used to build multimedia computer science applications that include sound, graphics, music, pictures, and movies. The students learn a key set of computer science tools and topics, as well as programming skills; such as how to design and use algorithms, and practical software engineering methods. The book also includes optional coverage of HCI, as well as rudimentary data structures and databases using the user-friendly Python language for implementation. Authors Guzdial and Ericson also demonstrate how to communicate compatibly through networks and do concurrent programming. 0133591522 / 9780133591521 Introduction to Computing and Programming in Python & MyProgrammingLab with eText Package Package consists of 0132923513 / 9780132923514 Introduction to Computing and Programming in Python 0133590747 / 9780133590746 MyProgrammingLab with eText -- Access Code Card -- for Introduction to Computing and Programming in Python

"This book provides a general overview about research on ubiquitous and pervasive computing and its applications, discussing the recent progress in this area and pointing out to scholars what they should do (best practices) and should not do (bad practices)"--Provided by publisher.

Internet of things networks have shown promising outcomes in the provisioning of potentially critical services such as safety applications, healthcare, and manufacturing. However, there are many challenges related to the security, data analysis, and limited resources of the performed operations that require further investigation. Additional research is necessary to address the concerns and doubts of researchers and industry professionals in the Internet of Things. Security, Data Analytics, and Energy-Aware Solutions in the IoT reports novel methodologies, theories, technologies, and solutions for security and data analytics techniques and energy-aware solutions for the Internet of Things. Covering a wide range of topics such as laser attacks and personal data, it is ideal for academicians, industry professionals, researchers, instructors, and students.

"Presents the fundamentals of hardware technologies, assembly language, computer arithmetic, pipelining, memory hierarchies and I/O"--

Computer Organization and Design

Introduction to Computing and Programming in Python Plus My Programming Lab -- Access Card Package

An Information Technology Approach

An innovative approach to building resilient, modern networks

Hybrid Problems, Hybrid Solutions

A complete guide to using the Internet to improve project management performance Empowered by a new generation of Internet technologies and Web applications, managers can now work together from virtually anywhere in the world and on any platform to manage and complete a project. With the help of the Internet, they can discuss the details of any project in advance, track a project's progress, adjust a timeline in real time, manage distributed teams, understand resource bottlenecks, and revise plans on the fly. In this important book, Internet expert Amit Maitra describes how to successfully exploit the power and versatility of the Internet as a tool for managing projects and processes, and how you can too. Maitra provides an overview of current Internet technologies and describes how to incorporate satellites and Internet-based project management techniques into high-technology, manufacturing, and operations environments. He presents a series of fascinating and instructive case studies that demonstrate the various successful approaches used at several leading-edge companies. Maitra provides managers with clear, step-by-step guidelines for designing, developing, and implementing Internet approaches customized to an organization's unique project management needs-and supplies helpful ideas for assessing the performance and ROI of project management Internet applications.

Computer Networks: A Systems Approach, Fifth Edition, explores the key principles of computer networking, with examples drawn from the real world of network and protocol design. Using the Internet as the primary example, this best-selling and classic textbook explains various protocols and networking technologies. The systems-oriented approach encourages students to think about how individual network components fit into a larger, complex system of interactions. This book has a completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, network security, and network applications such as e-mail and the Web, IP telephony and video streaming, and peer-to-peer file sharing. There is now increased focus on application layer issues where innovative and exciting research and design is currently the center of attention. Other topics include network design and architecture; the ways users can connect to a network; the concepts of switching, routing, and internetworking; end-to-end protocols; congestion control and resource allocation; and end-to-end data. Each chapter includes a problem statement, which introduces issues to be examined; shaded sidebars that elaborate on a topic or introduce a related advanced topic; What ' s Next? discussions that deal with emerging issues in research, the commercial world, or society; and exercises. This book is written for graduate or upper-division undergraduate classes in computer networking. It will also be useful for industry professionals retraining for network-related assignments, as well as for network practitioners seeking to understand the workings of network protocols and the big picture of networking. Completely updated content with expanded coverage of the topics of utmost importance to networking professionals and students, including P2P, wireless, security, and applications Increased focus on application layer issues where innovative and exciting research and design is currently the center of attention Free downloadable network simulation software and lab experiments manual available

Presents information on how to analyze risks to your networks and the steps needed to select and deploy the appropriate countermeasures to reduce your exposure to physical and network threats. Also imparts the skills and knowledge needed to identify and counter some fundamental security risks and requirements, including Internet security threats and measures (audit trails IP sniffing/spoofing etc.) and how to implement security policies and procedures. In addition, this book covers security and network design with respect to particular vulnerabilities and threats. It also covers risk assessment and mitigation and auditing and testing of security systems as well as application standards and technologies required to build secure VPNs, configure client software and server operating systems, IPsec-enabled routers, firewalls and SSL clients. This comprehensive book will provide essential knowledge and skills needed to select, design and deploy a public key infrastructure (PKI) to secure existing and future applications. * Chapters contributed by leaders in the field cover theory and practice of computer security technology, allowing the reader to develop a new level of technical expertise * Comprehensive and up-to-date coverage of security issues facilitates learning and allows the reader to remain current and fully informed from multiple viewpoints *

Presents methods of analysis and problem-solving techniques, enhancing the reader's grasp of the material and ability to implement practical solutions

Dowling ' s Engineering Your Future: An Australasian Guide, Fourth Edition is used for first year, core subjects across all Engineering disciplines. Building on the previous editions, this text has been updated with new references, while still maintaining a strong and practical emphasis on skills that are essential for problem solving and design. Numerous topical and locally focused examples of projects across engineering disciplines help demonstrate the role and responsibilities of a professional engineer. Themes of sustainability, ethical practice and effective communication are a constant throughout the text. This full-coloured print with interactive e-text resource has a variety of digital media embedded at the point of learning such as videos and knowledge-check questions to engage students and to help consolidate their learning.

Methods and Solutions

Engineering Your Future

Computer and Information Security Handbook

Principles and Protocols

Principles Of Artificial Neural Networks: Basic Designs To Deep Learning (4th Edition)

Internet of Things

This book explains the fundamentals of the Internet of Things - from different architectures for managing IoT platforms to the insights on trust, security, and privacy in IoT environments, including consumer electronic devices or home applications. This opens the doors to new innovations that will build novel interactions among things and humans, and enables the realization of smart cities, infrastructures, and services. The book presents a complete overview on the research and the technology of this rapidly emerging topic.

Appropriate for a first course on computer networking, this textbook describes the architecture and function of the application, transport, network, and link layers of the internet protocol stack, then examines audio and video networking applications, the underpinnings of encryption and network security, and the key issues of network management. Th

"This book is the best source for the most current, relevant, cutting edge research in the field of industrial informatics focusing on different methodologies of information technologies to enhance industrial fabrication, intelligence, and manufacturing processes"--Provided by publisher.

Computer Network Security and Cyber Ethics, 4th ed.McFarland

Corporate Computer Security

Research Anthology on Clean Energy Management and Solutions

Innovations and Solutions

Challenges and Solutions for Large-scale Information Management

A Practical Guide to Ubuntu Linux

Systems and Solutions

Energy usage and consumption continue to rise globally each year, with the most efficient and cost-effective energy sources causing huge impacts to the environment. In an effort to mitigate harmful effects to the environment, implementing clean energy resources and utilizing green energy management strategies have become worldwide initiatives, with many countries from all regions quickly becoming leaders in renewable energy usage. Still, not every energy resource is without flaws. Researchers must develop effective and low-cost strategies for clean energy in order to find the balance between production and consumption. The Research Anthology on Clean Energy Management and Solutions provides in-depth research that explores strategies and techniques used in the energy production field to optimize energy efficiency in order to maintain clean and safe use while delivering ample energy coverage. The anthology also seeks solutions to energy that have not yet been optimized or are still produced in a way that is harmful to the environment. Covering topics such as hydrogen fuel cells, renewable energy, solar power, solar systems, cost savings, and climate protection, this text is essential for electrical engineers, nuclear engineers, environmentalists, managers, policymakers, government officials, professionals in the energy industry, researchers, academicians, and students looking for the latest research on clean energy management.

WINE 2005, the First Workshop on Internet and Network Economics (WINE 2005), took place in Hong Kong, China, December 15-17, 2005. The symposium aims to provide a forum for researchers working in Internet and Network Economic algorithms from all over the world. The final count of electronic submissions was 372, of which 108 were accepted. It consists of the main program of 31 papers, of which the submitter email accounts are: 10 from edu (USA) accounts, 3 from hk (Hong Kong), 2 each from il (Israel), cn (China), ch (Switzerland), de (Germany), jp (Japan), gr (Greece), 1 each from hp. com, sohu. com, pl (Poland), fr (France), ca (Canada), and in (India). In addition, 77 papers from 20 countries or regions and 6 dot. coms were selected for 16 special focus tracks in the areas of Internet and Algorithmic Economics; E-Commerce Protocols; Security; Collaboration, Reputation and Social Networks; Algorithmic Mechanism; Financial Computing; Auction Algorithms; Online Algorithms; Collective Rationality; Pricing Policies; Web Mining Strategies; Network Economics; Coalition Strategies; Internet Protocols; Price Sequence; Equilibrium. We had one best student paper nomination: "Walrasian Equilibrium: Hardness, Approximations and Tracktable Instances" by Ning Chen and Atri Rudra. We would like to thank Andrew Yao for serving the conference as its Chair, with inspiring encouragement and far-sighted leadership. We would like to thank the International Program Committee for spending their valuable time and effort in the review process.

Law of the Internet, Fourth Edition is a two-volume up-to-date legal resource covering electronic commerce and online contracts, privacy and network security, intellectual property and online content management, secure electronic transactions, cryptography, and digital signatures, protecting intellectual property online through link licenses, frame control and other methods, online financial services and securities transactions, antitrust and other liability. The Law of the Internet, Fourth Edition quickly and easily gives you everything you need to provide expert counsel on: Privacy laws and the Internet Ensuring secure electronic transactions, cryptography, and digital signatures Protecting intellectual property online - patents, trademarks, and copyright Electronic commerce and contracting Online financial services and electronic payments Antitrust issues, including pricing, bundling and tying Internal network security Taxation of electronic commerce Jurisdiction in Cyberspace Defamation and the Internet Obscene and indecent materials on the Internet Regulation of Internet access and interoperability The authors George B. Delta and Jeffrey H. Matsuura -- two Internet legal experts who advise America's top high-tech companies -- demonstrate exactly how courts, legislators and treaties expand traditional law into the new context of the Internet and its commercial applications, with all the citations you'll need. The Law of the Internet also brings you up to date on all of the recent legal, commercial, and technical issues surrounding the Internet and provides you with the knowledge to thrive in the digital marketplace. Special features of this two-volume resource include timesaving checklists and references to online resources.

"This book provides original research on the theoretical and applied aspects of artificial life, as well as addresses scientific, psychological, and social issues of synthetic life-like behavior and abilities"--Provided by publisher.

Designing Solutions-Based Ubiquitous and Pervasive Computing: New Issues and Trends

Study Companion

Problem Solutions

New Issues and Trends

Computer Vision for Multimedia Applications: Methods and Solutions

Mobile Computing

The Most Complete, Easy-to-Follow Guide to Ubuntu Linux The #1 Ubuntu server resource, fully updated for Ubuntu 10.4 (Lucid Lynx)–the Long Term Support (LTS) release many companies will rely on for years! Updated JumpStarts help you set up Samba, Apache, Mail, FTP, NIS, OpenSSH, DNS, and other complex servers in minutes Hundreds of up-to-date examples, plus comprehensive indexes that deliver instant access to answers you can trust Mark Sobell's A Practical Guide to Ubuntu Linux®, Third Edition, is the most thorough and up-to-date reference to installing, configuring, and working with Ubuntu, and also offers comprehensive coverage of servers--critical for anybody interested in unleashing the full power of Ubuntu. This edition has been fully updated for Ubuntu 10.04 (Lucid Lynx), a milestone Long Term Support (LTS) release, which Canonical will support on desktops until 2013 and on servers until 2015. Sobell walks you through every essential feature and technique, from installing Ubuntu to working with GNOME, Samba, exim4, Apache, DNS, NIS, LDAP, g ufw, firestarter, iptables, even Perl scripting. His exceptionally clear explanations demystify everything from networking to security. You'll find full chapters on running Ubuntu from the command line and desktop (GUI), administrating systems, setting up networks and Internet servers, and much more. Fully updated JumpStart sections help you get complex servers running--often in as little as five minutes. Sobell draws on his immense Linux knowledge to explain both the "hows" and the "whys" of Ubuntu. He's taught hundreds of thousands of readers and never forgets what it's like to be new to Linux. Whether you're a user, administrator, or programmer, you'll find everything you need here--now, and for many years to come. The world's most practical Ubuntu Linux book is now even more useful! This book delivers Hundreds of easy-to-use Ubuntu examples Important networking coverage, including DNS, NFS, and Cacti Coverage of crucial Ubuntu topics such as sudo and the Upstart init daemon More detailed, usable coverage of Internet server configuration, including Apache (Web) and exim4 (email) servers State-of-the-art security techniques, including up-to-date firewall setup techniques using gufw and iptables, and a full chapter on OpenSSH A complete introduction to Perl scripting for automated administration Deeper coverage of essential admin tasks--from managing users to CUPS printing, configuring LANs to building a kernel Complete instructions on keeping Ubuntu systems up-to-date using aptitude, Synaptic, and the Software Sources window And much more...including a 500+ term glossary Includes DVD! Get the full version of Lucid Lynx, the latest Ubuntu LTS release!

Hybridness is a topical, if somewhat ambiguous, concept in a research environment where there is increasing acceptance of multiple co-existent research paradigms: artificial intelligence with its emphasis on reasoning with abstract symbols; the connectionist approach, with its exploration of the synergies of many interconnected simple structures; and Nouvelle Robotics, which places a focus on the interplay between systems generating skill or behaviour in complete agents. There is scope for considerable argument about principles, research programmes, the Nature of Things, as well as room for compromise and synthesis. This collection of papers, presented at AISB '95 (the 10th biennial conference on AI and the Simulation of Behaviour) reveals both argument and synthesis.

Panko's name appears first on the earlier edition.

Specifically oriented to the needs of information systems students, PRINCIPLES OF INFORMATION SECURITY, 5e delivers the latest technology and developments from the field. Taking a managerial approach, this bestseller teaches all the aspects of information security--not just the technical control perspective. It provides a broad review of the entire field of information security, background on many related elements, and enough detail to facilitate understanding of the topic. It covers the terminology of the field, the history of the discipline, and an overview of how to manage an information security program. Current and relevant, the fifth edition includes the latest practices, fresh examples, updated material on technical security controls, emerging legislative issues, new coverage of digital forensics, and hands-on application of ethical issues in IS security. It is the ultimate resource for future business decision-makers.

Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Controversies, Questions, and Strategies for Ethical Computing

Internet Solutions for Project Managers

A Systems Approach

Problems and Solutions in Quantum Computing and Quantum Information

Learning Management System Technologies and Software Solutions for Online Teaching: Tools and Applications

Ethics and Technology

This SpringerBrief discusses the rise of the smart grid from the perspective of computing and communications. It explains how current and next-generation network technology and methodologies help recognize the potential that the smart grid initiative promises. Chapters provide context on the smart grid before exploring specific challenges related to communication control and energy management. Topics include control in heterogeneous power supply, solutions for backhaul and wide area networks, home energy management systems, and technologies for smart energy management systems. Designed for researchers and professionals working on the smart grid, Communication Challenges and Solutions in the Smart Grid offers context and applications for the common issues of this developing technology. Advanced-level students interested in networking and communications engineering will also find the brief valuable.

Appropriate for Computer Networking or Introduction to Networking courses at both the undergraduate and graduate level in Computer Science, Electrical Engineering, CIS, MIS, and Business Departments. 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. Tanenbaum's in-depth application coverage includes email; the domain name system; the World Wide Web (both client- and server-side); and multimedia (including voice over IP, Internet radio video on demand, video conferencing, and streaming media.

The Architecture of Computer Hardware, Systems Software and Networking is designed help students majoring in information technology (IT) and information systems (IS) understand the structure and operation of computers and computer-based devices. Requiring only basic computer skills, this accessible textbook introduces the basic principles of system architecture and explores current technological practices and trends using clear, easy-to-understand language. Throughout the text, numerous relatable examples, subject-specific illustrations, and in-depth case studies reinforce key learning points and show students how important concepts are applied in the real world. This fully-updated sixth edition features a wealth of new and revised content that reflects today's technological landscape. Organized into five parts, the book first explains the role of the computer in information systems and provides an overview of its components. Subsequent sections discuss the representation of data in the computer, hardware architecture and operational concepts, the basics of computer networking, system software and operating systems, and various interconnected systems and components. Students are introduced to the material using ideas already familiar to them, allowing them to gradually build upon what they have learned without being overwhelmed and develop a deeper knowledge of computer architecture.

Master Modern Networking by Understanding and Solving Real Problems Computer Networking Problems and Solutions offers a new approach to understanding networking that not only illuminates current systems but prepares readers for whatever comes next. Its problem-solving approach reveals why modern computer networks and protocols are designed as they are, by explaining the problems any protocol or system must overcome, considering common solutions, and showing how those solutions have been implemented in new and mature protocols. Part I considers data transport (the data plane). Part II covers protocols used to discover and use topology and reachability information (the control plane). Part III considers several common network designs and architectures, including data center fabrics, MPLS cores, and modern Software-Defined Wide Area Networks (SD-WAN). Principles that underlie technologies such as Software Defined Networks (SDNs) are considered throughout, as solutions to problems faced by all networking technologies. This guide is ideal for beginning network engineers, students of computer networking, and experienced engineers seeking a deeper understanding of the technologies they use every day. Whatever your background, this book will help you quickly recognize problems and solutions that constantly recur, and apply this knowledge to new technologies and environments. Coverage Includes · Data and networking transport · Lower- and higher-level transports and interlayer discovery · Packet switching · Quality of Service (QoS) · Virtualized networks and services · Network topology discovery · Unicast loop free routing · Reacting to topology changes · Distance vector control planes, link state, and path vector control · Control plane policies and centralization · Failure domains · Securing networks and transport · Network design patterns · Redundancy and resiliency · Troubleshooting · Network disaggregation · Automating network management · Cloud computing · Networking the Internet of Things (IoT) · Emerging trends and technologies

Computer Networks

Computer Networking Problems and Solutions

Data Intensive Distributed Computing: Challenges and Solutions for Large-scale Information Management

Service-oriented Architecture Best Practices

Computer Network Security and Cyber Ethics, 4th ed.

Environmental Science

"This book provides a comprehensive and unified view of the latest and most innovative research findings on the many existing interactions between mobile networking, wireless communications, and ubiquitous computing"--Provided by publisher.

"This book presents the latest developments in computer vision methods applicable to various problems in multimedia computing, including new ideas, as well as problems in computer vision and multimedia computing"--Provided by publisher.

Technology is changing the practice of healthcare by the ways medical information is stored, shared, and accessed. With mobile innovations, new strategies are unfolding to further advance processes and procedures in medical settings. Next-Generation Mobile and Pervasive

Healthcare Solutions is an advanced reference source for the latest research on emerging progress and applications within mobile health initiatives and health informatics. Featuring coverage on a broad range of topics and perspectives such as electronic health records

(EHR), clinical decision support systems, and medical ontologies, this publication is ideally designed for professionals and researchers seeking scholarly material on the increased use of mobile health applications.

Learn to apply the significant promise of SOA to overcome the formidable challenges of distributed enterprise development.

Security, Data Analytics, and Energy-Aware Solutions in the IoT

Data Communications and Networking

Internet and Network Economics

Next-Generation Mobile and Pervasive Healthcare Solutions

Enterprise Knowledge Infrastructures

Handbook of Research on Industrial Informatics and Manufacturing Intelligence: Innovations and Solutions

"This book focuses on the challenges of distributed systems imposed by the data intensive applications, and on the different state-of-the-art solutions proposed to overcome these challenges"--Provided by publisher.

Quantum computing and quantum information are two of the fastest growing and most exciting research fields in physics. Entanglement, teleportation and the possibility of using the non-local behavior of quantum mechanics to factor integers in random polynomial time have also added to this new interest. This book presents a huge collection of problems in quantum computing and quantum information together with their detailed solutions, which will prove to be invaluable to students as well as researchers in these fields. Each chapter gives a comprehensive introduction to the topics. All the important concepts and areas such as quantum gates and quantum circuits, product Hilbert spaces, entanglement and entanglement measures, teleportation, Bell states, Bell measurement, Bell inequality, Schmidt decomposition, quantum Fourier transform, magic gate, von Neumann entropy, quantum cryptography, quantum error corrections, quantum games, number states and Bose operators, coherent states, squeezed states, Gaussian states, coherent Bell states, POVM measurement, quantum optics networks, beam splitter, phase shifter and Kerr Hamilton operator are included. A chapter on quantum channels has also been added. Furthermore a chapter on boolean functions and quantum gates with mapping bits to qubits is included. The topics range in difficulty from elementary to advanced. Almost all problems are solved in detail and most of the problems are self-contained. Each chapter also contains supplementary problems to challenge the reader. Programming problems with Maxima and SymbolicC++ implementations are also provided.

An Australasian Guide

From the Foundations to the Latest Frontiers in Research