

Computer Network Techmax Publication For Engineering

Focused on fundamental concepts and practical applications, this book provides a strong foundation in the principles and terminology of computer networking and internet technology. This thoroughly revised second edition, incorporating some of the latest technical features in networking, is suitable for introductory one-semester courses for undergraduate students of computer science and engineering, electronics and telecommunication engineering, information technology, as well as students of computer applications (BCA and MCA). This text begins with an overview of computer networking and a discussion on data communication. Then it proceeds to explain how computer networks such as local area networks (LANs) and wide area networks (WANs) work, and how internetworking is implemented. Besides, the book provides a description of the Internet and TCP/IP protocol. With the prolific growth of networking, 'network management and security' has become an increasingly important part of the academic curriculum. This topic has been adequately dealt with in a separate chapter. The practical aspects of networking, listing the essential requirements needed for actually setting up a computer network, are thoroughly explained in the final chapter of the book.

WHAT IS NEW IN THE SECOND EDITION

- Wireless LAN in Chapter 4
- API and Socket Programming and End-to-End Protocol in Chapter 7
- Remote Procedure Call (RPC) Protocol in Chapter 8
- Dynamic Host Configuration Protocol – Error reporting by ICMP – Virtual Private Network (VPN) in Chapter 9
- Network Address Translation (NAT)

An appendix dealing with telephone networking, wireless networking, cellular networking and satellite and telemetry communication has been included to meet the requirements of the students.

This Third Edition, in response to the enthusiastic reception given by academia and students to the previous edition, offers a cohesive presentation of all aspects of theoretical computer science, namely automata, formal languages, computability, and complexity. Besides, it includes coverage of mathematical preliminaries.

NEW TO THIS EDITION

- Expanded sections on pigeonhole principle and the principle of induction (both in Chapter 2)
- A rigorous proof of Kleene's theorem (Chapter 5)
- Major changes in the chapter on Turing machines (TMs) – A new section on high-level description of TMs – Techniques for the construction of TMs – Multitape TM and nondeterministic TM
- A new chapter (Chapter 10) on decidability and recursively enumerable languages
- A new chapter (Chapter 12) on complexity theory and NP-complete problems
- A section on quantum computation in Chapter 12.

KEY FEATURES

- Objective-type questions in each

chapter—with answers provided at the end of the book. • Eighty-three additional solved examples—added as Supplementary Examples in each chapter. • Detailed solutions at the end of the book to chapter-end exercises. The book is designed to meet the needs of the undergraduate and postgraduate students of computer science and engineering as well as those of the students offering courses in computer applications. Modern C++ at your fingertips! About This Book This book gets you started with the exciting world of C++ programming It will enable you to write C++ code that uses the standard library, has a level of object orientation, and uses memory in a safe and effective way It forms the basis of programming and covers concepts such as data structures and the core programming language Who This Book Is For A computer, an internet connection, and the desire to learn how to code in C++ is all you need to get started with this book. What You Will Learn Get familiar with the structure of C++ projects Identify the main structures in the language: functions and classes Feel confident about being able to identify the execution flow through the code Be aware of the facilities of the standard library Gain insights into the basic concepts of object orientation Know how to debug your programs Get acquainted with the standard C++ library In Detail C++ has come a long way and is now adopted in several contexts. Its key strengths are its software infrastructure and resource-constrained applications, including desktop applications, servers, and performance-critical applications, not to forget its importance in game programming. Despite its strengths in these areas, beginners usually tend to shy away from learning the language because of its steep learning curve. The main mission of this book is to make you familiar and comfortable with C++. You will finish the book not only being able to write your own code, but more importantly, you will be able to read other projects. It is only by being able to read others' code that you will progress from a beginner to an advanced programmer. This book is the first step in that progression. The first task is to familiarize you with the structure of C++ projects so you will know how to start reading a project. Next, you will be able to identify the main structures in the language, functions, and classes, and feel confident being able to identify the execution flow through the code. You will then become aware of the facilities of the standard library and be able to determine whether you need to write a routine yourself, or use an existing routine in the standard library. Throughout the book, there is a big emphasis on memory and pointers. You will understand memory usage, allocation, and access, and be able to write code that does not leak memory. Finally, you will learn about C++ classes and get an introduction to object orientation and polymorphism. Style and approach This straightforward tutorial will help you build strong skills in C++ programming, be it for enterprise software or

for low-latency applications such as games or embedded programming. Filled with examples, this book will take you gradually up the steep learning curve of C++.

This book defines all modern tech terms and explains how the machines and devices that saturate our everyday life work exactly. But here's the important part: the explanations in this book are written simply and in a way that the average person can understand. With over 100 chapters, you'll remove the confusions associated with modern-day technology, and gain answers to questions you may not even know you had.

Beginning C++ Programming

Theory of Computer Science

Modern Power Electronics

Software Testing and Quality Assurance

Digital Electronics

Automata, Languages and Computation

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. The Principles and Practice of Cryptography and Network Security Stallings' Cryptography and Network Security, Seventh Edition, introduces the reader to the compelling and evolving field of cryptography and network security. In an age of viruses and hackers, electronic eavesdropping, and electronic fraud on a global scale, security is paramount. The purpose of this book is to provide a practical survey of both the principles and practice of cryptography and network security. In the first part of the book, the basic issues to be addressed by a network security capability are explored by providing a tutorial and survey of cryptography and network security technology. The latter part of the book deals with the practice of network security: practical applications that have been implemented and are in use to provide network security. The Seventh Edition streamlines subject matter with new and updated material — including Sage, one of the most important features of the book. Sage is an open-source, multiplatform, freeware package that implements a very powerful, flexible, and easily learned mathematics and computer algebra system. It provides hands-on experience with cryptographic algorithms and supporting homework assignments. With Sage, the reader learns a powerful tool that can be used for virtually any mathematical application. The book also provides an unparalleled degree of support for the reader to ensure a successful learning experience.

This book explains use of data science-based techniques for modeling and providing optimal solutions to complex problems in civil engineering. It discusses civil engineering problems like air, water and land pollution, climate crisis, transportation infrastructures, traffic and travel modes, mobility services, and so forth. Divided into two sections, the first one deals with the basics of data science and essential mathematics while the second section covers pertinent applications in structural and environmental engineering, construction management, and transportation. Features: Details information on essential mathematics required to implement civil engineering applications using data science techniques. Discusses broad background of data science and its fundamentals. Focusses on structural engineering, transportation systems, water resource management, geomatics, and environmental engineering. Includes python programming libraries to solve complex problems. Addresses various real-world applications of data science based civil engineering use cases. This book aims at senior undergraduate students in Civil Engineering and Applied Data Science.

Data Communication and Computer Network: Easy to Learn and Simple to Develop is ideal for self-study, as it covers all essential topics in depth and is

easy to understand. The author's unique approach thoroughly illustrates the theoretical and practical aspects of data communication and the computer network, and the technologies and the tools that academic and network managers simply must know. This textbook is perfect for students pursuing their B.E., B.Tech., M.C.A., B.Sc. (Computer Science), or BCA degrees. It presupposes no prior experience with data communication and computer network on the part of the reader and serves as a comprehensive introduction to data communication and computer network concepts and network application development. Data Communication, Data Representation Layered Tasks, TCP/IP Protocol Suite, Physical Layer and Media, Transmission Impairment, Multiplexing, Data Link Layer, UDP and Application Layer are some of the concepts that the book deals with.

The fundamentals and implementation of digital electronics are essential to understanding the design and working of consumer/industrial electronics, communications, embedded systems, computers, security and military equipment. Devices used in applications such as these are constantly decreasing in size and employing more complex technology. It is therefore essential for engineers and students to understand the fundamentals, implementation and application principles of digital electronics, devices and integrated circuits. This is so that they can use the most appropriate and effective technique to suit their technical need. This book provides practical and comprehensive coverage of digital electronics, bringing together information on fundamental theory, operational aspects and potential applications. With worked problems, examples, and review questions for each chapter, Digital Electronics includes: information on number systems, binary codes, digital arithmetic, logic gates and families, and Boolean algebra; an in-depth look at multiplexers, de-multiplexers, devices for arithmetic operations, flip-flops and related devices, counters and registers, and data conversion circuits; up-to-date coverage of recent application fields, such as programmable logic devices, microprocessors, microcontrollers, digital troubleshooting and digital instrumentation. A comprehensive, must-read book on digital electronics for senior undergraduate and graduate students of electrical, electronics and computer engineering, and a valuable reference book for professionals and researchers.

Computer Networking: A Top-Down Approach Featuring the Internet, 3/e

Cryptography and Network Security

Dictionary of Computer Terms

Computer Network Security

Security in Computing

Python Standard Library

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.

CD-ROM contains: programming examples from the book and a demo of the PythonWorks IDE.

Designing distributed computing systems is a complex process requiring a solid understanding of the design problems and the theoretical and practical aspects of their solutions. This comprehensive textbook covers the fundamental principles and models underlying the theory, algorithms and systems aspects of distributed computing. Broad and detailed coverage of the theory is balanced with practical systems-related issues such as mutual exclusion, deadlock detection, authentication, and failure recovery. Algorithms are carefully selected, lucidly presented, and described without complex proofs. Simple explanations and illustrations are used to elucidate the algorithms. Important emerging topics such as peer-to-peer networks and network security are also considered. With vital algorithms, numerous illustrations, examples and homework problems, this textbook is suitable for advanced undergraduate and graduate students of electrical and computer engineering and computer science. Practitioners in data networking and sensor networks will also find this a valuable resource. Additional resources are available online at www.cambridge.org/9780521876346.

This book covers elementary discrete mathematics for computer science and engineering. It emphasizes mathematical definitions and proofs as well as applicable methods. Topics include formal logic notation, proof methods; induction, well-ordering; sets, relations; elementary graph theory; integer congruences; asymptotic notation and growth of functions; permutations and combinations, counting principles; discrete probability. Further selected topics may also be covered, such as recursive definition and structural induction; state machines and invariants; recurrences; generating functions.

ADVANCED COMPUTER NETWORK

You Are Not Stupid

A Beginner's Guide

Master OOP by Building Games and GUIs

A Systems Approach

Computers and Technology Simplified

A Hands-On Approach to Electrical Design Electrical Design of Commercial and Industrial Buildings teaches students the critical components of electrical design through an integrated approach that combines fundamental theory with hands-on practice. By taking an applied-learning approach to instruction, this text explains electrical principles, design criteria, codes, and other key elements of the design process, then guides students through each step as they create their own electrical design plans. A companion Student Resource CD-ROM accompanies the printed textbook with sample plans - accompanied by example equipment lists, lighting fixture schedules, and calculation templates - provides students with a comprehensive framework for experiential learning. As an integrated learning tool, Electrical Design of Commercial and Industrial Buildings is both an essential teaching guide for electrical design instructors and an enduring reference book for students and professionals.

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). Each chapter follows a consistent approach: Tanenbaum presents key principles, then illustrates them utilizing real-world example networks that run through the entire book-the Internet, and wireless networks, including Wireless LANs, broadband wireless and Bluetooth. The Fifth Edition includes a chapter devoted exclusively to network security. The textbook is supplemented by a Solutions Manual, as well as a Website containing PowerPoint slides, art in various forms, and other tools for instruction, including a protocol simulator whereby students can develop and test their own network

protocols.

Master the essential skills needed to recognize and solve complex problems with machine learning and deep learning. Using real-world examples that leverage the popular Python machine learning ecosystem, this book is your perfect companion for learning the art and science of machine learning to become a successful practitioner. The concepts, techniques, tools, frameworks, and methodologies used in this book will teach you how to think, design, build, and execute machine learning systems and projects successfully. Practical Machine Learning with Python follows a structured and comprehensive three-tiered approach packed with hands-on examples and code. Part 1 focuses on understanding machine learning concepts and tools. This includes machine learning basics with a broad overview of algorithms, techniques, concepts and applications, followed by a tour of the entire Python machine learning ecosystem. Brief guides for useful machine learning tools, libraries and frameworks are also covered. Part 2 details standard machine learning pipelines, with an emphasis on data processing analysis, feature engineering, and modeling. You will learn how to process, wrangle, summarize and visualize data in its various forms. Feature engineering and selection methodologies will be covered in detail with real-world datasets followed by model building, tuning, interpretation and deployment. Part 3 explores multiple real-world case studies spanning diverse domains and industries like retail, transportation, movies, music, marketing, computer vision and finance. For each case study, you will learn the application of various machine learning techniques and methods. The hands-on examples will help you become familiar with state-of-the-art machine learning tools and techniques and understand what algorithms are best suited for any problem. Practical Machine Learning with Python will empower you to start solving your own problems with machine learning today! What You'll Learn Execute end-to-end machine learning projects and systems Implement hands-on examples with industry standard, open source, robust machine learning tools and frameworks Review case studies depicting applications of machine learning and deep learning on diverse domains and industries Apply a wide range of machine learning models including regression, classification, and clustering. Understand and apply the latest models and methodologies from deep learning including CNNs, RNNs, LSTMs and transfer learning. Who This Book Is For IT professionals, analysts, developers, data scientists, engineers, graduate students

A self-contained guide to the state-of-the-art in cooperative communications and networking techniques for next generation cellular wireless systems, this comprehensive book provides a succinct understanding of the theory, fundamentals and techniques involved in achieving efficient cooperative wireless communications in cellular wireless networks. It consolidates the essential information, addressing both theoretical and practical aspects of cooperative communications and networking in the context of cellular design. This one-stop resource covers the basics of cooperative communications techniques for cellular systems, advanced transceiver design, relay-based cellular networks, and game-theoretic and micro-economic models for protocol design in cooperative cellular wireless networks. Details of ongoing standardization activities are also included. With contributions from experts in the field divided into five distinct sections, this easy-to-follow book delivers the background needed to develop and implement cooperative mechanisms for cellular wireless networks.

SDN: Software Defined Networks

Systems, Modulation, and Noise

Computer Networks

Principles, Algorithms, and Systems

Principles of Communications

Developing Core Competencies to Help Outperform the Competition

This book covers the syllabus of GGSIPU, DU, UPTU, PTU, MDU, Pune University and many other universities. It is useful for B.Tech(CSE/IT), M.Tech(CSE), MCA(SE) students. Many solved problems have been added to make this book more fresh. It has been

divided in three parts :Parallel Algorithms, Parallel Programming and Super Computers.

The computing world today is in the middle of a revolution: mobile clients and cloud computing have emerged as the dominant paradigms driving programming and hardware innovation today. The Fifth Edition of Computer Architecture focuses on this dramatic shift, exploring the ways in which software and technology in the cloud are accessed by cell phones, tablets, laptops, and other mobile computing devices. Each chapter includes two real-world examples, one mobile and one datacenter, to illustrate this revolutionary change. Updated to cover the mobile computing revolution Emphasizes the two most important topics in architecture today: memory hierarchy and parallelism in all its forms. Develops common themes throughout each chapter: power, performance, cost, dependability, protection, programming models, and emerging trends ("What's Next") Includes three review appendices in the printed text. Additional reference appendices are available online. Includes updated Case Studies and completely new exercises.

A superior primer on software testing and quality assurance, from integration to execution and automation This important new work fills the pressing need for a user-friendly text that aims to provide software engineers, software quality professionals, software developers, and students with the fundamental developments in testing theory and common testing practices. Software Testing and Quality Assurance: Theory and Practice equips readers with a solid understanding of: Practices that support the production of quality software Software testing techniques Life-cycle models for requirements, defects, test cases, and test results Process models for units, integration, system, and acceptance testing How to build test teams, including recruiting and retaining test engineers Quality Models, Capability Maturity Model, Testing Maturity Model, and Test Process Improvement Model Expertly balancing theory with practice, and complemented with an abundance of pedagogical tools, including test questions, examples, teaching suggestions, and chapter summaries, this book is a valuable, self-contained tool for professionals and an ideal introductory text for courses in software testing, quality assurance, and software engineering.

Conceptualizing deep learning in computer vision applications using PyTorch and Python libraries. **KEY FEATURES** Covers a variety of computer vision projects, including face recognition and object recognition such as Yolo, Faster R-CNN. Includes graphical representations and illustrations of neural networks and teaches how to program them. Includes deep learning techniques and architectures introduced by Microsoft, Google, and the University of Oxford. **DESCRIPTION** Elements of Deep Learning for Computer Vision gives a thorough understanding of deep learning and provides highly accurate computer vision solutions while using libraries like PyTorch. This book introduces you to Deep Learning and explains all the concepts required to understand the basic working, development, and tuning of a neural network using Pytorch. The book then addresses the field of computer vision using two libraries, including the Python wrapper /version of OpenCV and PIL. After establishing and understanding both the primary concepts, the book addresses them together by explaining Convolutional Neural Networks(CNNs). CNNs are further elaborated using top industry standards and research to explain how they provide complicated Object Detection in images and videos, while also explaining their evaluation. Towards the end, the book explains how to develop a fully functional object detection model, including its deployment over APIs. By the end of this book, you are well-equipped with the role of deep learning in the field of computer vision along with a guided process to design deep learning solutions. **WHAT YOU WILL LEARN** Get to know the mechanism of deep learning and how neural networks operate. Learn to develop a highly accurate neural network model. Access to rich

Python libraries to address computer vision challenges. Build deep learning models using PyTorch and learn how to deploy using the API. Learn to develop Object Detection and Face Recognition models along with their deployment. WHO THIS BOOK IS FOR This book is for the readers who aspire to gain a strong fundamental understanding of how to infuse deep learning into computer vision and image processing applications. Readers are expected to have intermediate Python skills. No previous knowledge of PyTorch and Computer Vision is required.

TABLE OF CONTENTS 1. An Introduction to Deep Learning 2. Supervised Learning 3. Gradient Descent 4. OpenCV with Python 5. Python Imaging Library and Pillow 6. Introduction to Convolutional Neural Networks 7. GoogLeNet, VGGNet, and ResNet 8. Understanding Object Detection 9. Popular Algorithms for Object Detection 10. Faster RCNN with PyTorch and YoloV4 with Darknet 11. Comparing Algorithms and API Deployment with Flask 12. Applications in Real World

Introduction to Embedded Systems, Second Edition

The Hardware Software Interface

Principles, Devices and Applications

11th International Symposium, WADS 2009, Banff, Canada, August 21-23, 2009. Proceedings

A Cyber-Physical Systems Approach

Data Communication and Computer Network: Easy to Learn and Simple to Develop

An introduction to the engineering principles of embedded systems, with a focus on modeling, design, and analysis of cyber-physical systems. The most visible use of computers and software is processing information for human consumption. The vast majority of computers in use, however, are much less visible. They run the engine, brakes, seatbelts, airbag, and audio system in your car. They digitally encode your voice and construct a radio signal to send it from your cell phone to a base station. They command robots on a factory floor, power generation in a power plant, processes in a chemical plant, and traffic lights in a city. These less visible computers are called embedded systems, and the software they run is called embedded software. The principal challenges in designing and analyzing embedded systems stem from their interaction with physical processes. This book takes a cyber-physical approach to embedded systems, introducing the engineering concepts underlying embedded systems as a technology and as a subject of study. The focus is on modeling, design, and analysis of cyber-physical systems, which integrate computation, networking, and physical processes. The second edition offers two new chapters, several new exercises, and other improvements. The book can be used as a textbook at the advanced undergraduate or introductory graduate level and as a professional reference for practicing engineers and computer scientists. Readers should have some familiarity with machine structures, computer programming, basic discrete mathematics and algorithms, and signals and systems.

Power up your Python with object-oriented programming and learn how to write powerful, efficient, and re-usable code. Object-Oriented Python is an intuitive and thorough guide to mastering object-oriented programming from the ground up. You ' ll cover the basics of building classes and creating objects, and put theory into practice using the pygame package with clear examples that help visualize the object-oriented style. You ' ll explore the key concepts of object-oriented programming — encapsulation, polymorphism, and inheritance — and learn not just how to code with objects, but the absolute best practices for doing so. Finally, you ' ll bring it all together by building a complex video game,

complete with full animations and sounds. The book covers two fully functional Python code packages that will speed up development of graphical user interface (GUI) programs in Python.

This book constitutes the refereed proceedings of the 11th Algorithms and Data Structures Symposium, WADS 2009, held in Banff, Canada, in August 2009. The Algorithms and Data Structures Symposium - WADS (formerly "Workshop on Algorithms and Data Structures") is intended as a forum for researchers in the area of design and analysis of algorithms and data structures. The 49 revised full papers presented in this volume were carefully reviewed and selected from 126 submissions. The papers present original research on algorithms and data structures in all areas, including bioinformatics, combinatorics, computational geometry, databases, graphics, and parallel and distributed computing.

From the reviews: "This book offers a coherent treatment, at the graduate textbook level, of the field that has come to be known in the last decade or so as computational geometry. ... The book is well organized and lucidly written; a timely contribution by two founders of the field. It clearly demonstrates that computational geometry in the plane is now a fairly well-understood branch of computer science and mathematics. It also points the way to the solution of the more challenging problems in dimensions higher than two." #Mathematical Reviews#1 "... This remarkable book is a comprehensive and systematic study on research results obtained especially in the last ten years. The very clear presentation concentrates on basic ideas, fundamental combinatorial structures, and crucial algorithmic techniques. The plenty of results is cleverly organized following these guidelines and within the framework of some detailed case studies. A large number of figures and examples also aid the understanding of the material. Therefore, it can be highly recommended as an early graduate text but it should prove also to be essential to researchers and professionals in applied fields of computer-aided design, computer graphics, and robotics." #Biometrical Journal#2

Graph Theory with Applications to Engineering and Computer Science

Data Science for Civil Engineering

5th International Conference, on Mathematical Methods, Models, and Architectures for Computer Network Security, MMM-ACNS 2010, St. Petersburg, Russia, September 8-10, 2010, Proceedings

An Introduction

Explore Deep Neural Network Architectures, PyTorch, Object Detection Algorithms, and Computer Vision Applications for Python Coders (English Edition)

Transmission and Distribution Electrical Engineering

Updated concepts and tools to set up project plans, schedule work, monitor progress-and consistently achieve desired project results. In today's time-based and cost-conscious global business environment, tight project deadlines and stringent expectations are the norm. This classic book provides businesspeople with an excellent introduction to project management, supplying sound, basic information (along with updated tools and techniques) to understand and master the complexities and nuances of project management. Clear and down-to-earth, this step-by-step guide explains how to effectively spearhead every stage of a project-from developing the goals and objectives to managing the project team-and make project management work in any company. This updated second edition includes: * New material on the Project Management Body of Knowledge (PMBOK) * Do's and don'ts of implementing scheduling software* Coverage of the PMP certification offered by the Project Management Institute* Updated information on developing problem statements and mission statements* Techniques for implementing today's project management technologies in any organization-in any industry.

I May observed that recent developments in power electronics have proceeded in two different directions,namely,low power range power supplies using high frequency PWM technique and medium to high power range energy control systems to serve specific Purpose.

Explore the emerging definitions, protocols, and standards for SDN—software-defined, software-driven, programmable networks—with this comprehensive guide. Two senior network engineers show you what ' s required for building networks that use software for bi-directional communication between applications and the underlying network infrastructure. This vendor-agnostic book also presents several SDN use cases, including bandwidth scheduling and manipulation, input traffic and triggered actions, as well as some interesting use cases around big data, data center overlays, and network-function virtualization. Discover how enterprises and service providers alike are pursuing SDN as it continues to evolve. Explore the current state of the OpenFlow model and centralized network control Delve into distributed and central control, including data plane generation Examine the structure and capabilities of commercial and open source controllers Survey the available technologies for network programmability Trace the modern data center from desktop-centric to highly distributed models Discover new ways to connect instances of network-function virtualization and service chaining Get detailed information on constructing and maintaining an SDN network topology Examine an idealized SDN framework for controllers, applications, and ecosystems

This book constitutes the refereed proceedings of the 5th International Conference on Mathematical Methods, Models, and Architectures for Computer Network Security, MMM-ACNS 2010, held in St. Petersburg, Russia in September 2010. The 16 revised full papers and 6 revised short papers presented together with 5 invited papers were carefully reviewed and selected from a total of 54 submissions. The papers are organized in topical sections on security modeling and covert channels, security policies and formal analysis of security properties, authentication, authorization, access control and public key cryptography, intrusion and malware detection, security of multi-agent systems and software protection, as well as. adaptive security, security analysis and virtualization.

Practical Machine Learning with Python

Theory and Practice

A Quantitative Approach

Official Gazette of the United States Patent and Trademark Office

Mathematics for Computer Science

Fundamentals of Computer Networks

Special Features: " Covers Practical Examples About The Book: The Advanced Computer Network book covers most of the key network technologies, services, and protocols that are frequently used in current networks [SS-1]. The book helps you to understand Optical Networking Standards - SONET /SDH and DWDM; Packet Switching Protocols - X.25, SMDS, and ATM; Protocols and Interfaces in TCP/IP suite; Internet Routing Protocols - RIP, OSPF, BGP, MOSPF, and DVMRP; Network Management Protocol - SNMP; Traffic Engineering and Capacity Planning; Protocols and Standards for Multimedia over Internet - RTP, RSVP, G.729, G.723, and H.323; Network Security Standards - DMZ, NAT , Prot forwarding, Proxy Server, and Packet Filtering; and Backbone Network Design.

Chapter 1: System Studies -- Chapter 2: Drawings and Diagrams -- Chapter 3: Substation Layouts -- Chapter 4: Substation Auxiliary Power Supplies -- Chapter 5: Current and Voltage Transformers -- Chapter 6: Insulators -- Chapter 7: Substation Building Services --

Chapter 8: Earthing and Bonding -- Chapter 9: Insulation Co-ordination -- Chapter 10: Relay Protection -- Chapter 11: Fuses and Miniature Circuit Breakers -- Chapter 12: Cables -- Chapter 13: Switchgear -- Chapter 14: Power Transformers -- Chapter 15: Substation and Overhead Line Foundations -- Chapter 16: Overhead Line Routing -- Chapter 17: Structures, Towers and Poles -- Chapter 18: Overhead Line Conductor and Technical Specifications -- Chapter 19: Testing and Commissioning -- Chapter 20: Electromagnetic Compatibility -- Chapter 21: Supervisory Control and Data Acquisition -- Chapter 22: Project Management -- Chapter 23: Distribution Planning -- Chapter 24: Power Quality- Harmonics in Power Systems -- Chapter 25: Power Qual ...

The new RISC-V Edition of Computer Organization and Design features the RISC-V open source instruction set architecture, the first open source architecture designed to be used in modern computing environments such as cloud computing, mobile devices, and other embedded systems. With the post-PC era now upon us, Computer Organization and Design moves forward to explore this generational change with examples, exercises, and material highlighting the emergence of mobile computing and the Cloud. Updated content featuring tablet computers, Cloud infrastructure, and the x86 (cloud computing) and ARM (mobile computing devices) architectures is included. An online companion Web site provides advanced content for further study, appendices, glossary, references, and recommended reading. Features RISC-V, the first such architecture designed to be used in modern computing environments, such as cloud computing, mobile devices, and other embedded systems Includes relevant examples, exercises, and material highlighting the emergence of mobile computing and the cloud

Learn Python Quickly, A Programmer-Friendly GuideDESCRIPTIONMost Programmer's learning Python are usually comfortable with some or the other programming language and are not interested in going through the typical learning curve of learning the first programming language. Instead, they are looking for something that can get them off the ground quickly. They are looking for similarities and differences in a feature that they have used in other language(s). This book should help them immediately. It guides you from the fundamentals of using module through the use of advanced object orientation. KEY FEATURESStrengthens the foundations, as detailed explanation of programming language concepts are given in simple manner. Lists down all the important points that you need to know related to various topics in an organized manner.Prepare you for coding related interview and theoretical questions.Provides In depth explanation of complex topics and Questions.Focuses on how to think logically to solve a problem.Follows a systematic approach that will help you to prepare for an interview in short duration of time.Exercises are exceptionally useful to complete the reader's understanding of a topic. WHAT WILL YOU LEARNData types, Control flow instructions, console & File Input/OutputStrings, list & tuples, List comprehensionSets & Dictionaries, Functions & LambdasDictionary ComprehensionModules, classes and objects, InheritanceOperator overloading, Exception handlingIterators & Generators, Decorators, Command-line Parsing WHO THIS BOOK IS FORStudents, Programmers, researchers, and software developers who wish to learn the basics of Python programming language. Table of Contents 1. Introduction to Python2. Python

Basics 3. Strings4. Decision Control Instruction5. Repetition Control Instruction6. Console Input/Output7. Lists8. Tuples9. Sets10. Dictionaries11. Comprehensions12. Functions13. Recursion14. Functional Programming15. Modules and Packages16. Namespaces17. Classes and Objects18. Intricacies of Classes and Objects19. Containership and Inheritance20. Iterators and Generators21. Exception Handling22. File Input/Output 23. Miscellany24. Multi-threading25. SynchronizationAUTHOR

BIOYashavant KanetkarThrough his books and Quest Video Courses on C, C++, Java, Python, Data Structures, .NET, IoT, etc. Yashavant Kanetkar has created, moulded and groomed lacs of IT careers in the last three decades. Yashavant's books and Quest videos have made a significant contribution in creating top-notch IT manpower in India and abroad.Yashavant's books are globally recognized and millions of students / professionals have benefitted from them. Yashavant's books have been translated into Hindi, Gujarati, Japanese, Korean and Chinese languages. Many of his books are published in India, USA, Japan, Singapore, Korea and China.Yashavant is a much sought after speaker in the IT field and has conducted seminars/workshops at TedEx, IITs, IIITs, NITs and global software companies.Yashavant has been honored with the prestigious "e;Distinguished Alumnus Award"e; by IIT Kanpur for his entrepreneurial, professional and academic excellence. This award was given to top 50 alumni of IIT Kanpur who have made significant contribution towards their profession and betterment of society in the last 50 years. In recognition of his immense contribution to IT education in India, he has been awarded the "e;Best .NET Technical Contributor"e; and "e;Most Valuable Professional"e; awards by Microsoft for 5 successive years.Yashavant holds a BE from VJTI Mumbai and M.Tech. from IIT Kanpur. Yadhavant's current affiliations include being a Director of KICIT Pvt Ltd. And KSET Pvt Ltd.His Linkedin profile:

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