

Guide To Computer Network Security Computer Communications And Networks

The perimeter defenses guarding your network perhaps are not as secure as you think. Hosts behind the firewall have no defenses of their own, so when a host in the "trusted" zone is breached, access to your data center is not far behind. That's an all-too-familiar scenario today. With this practical book, you'll learn the principles behind zero trust architecture, along with details necessary to implement it. The Zero Trust Model treats all hosts as if they're internet-facing, and considers the entire network to be compromised and hostile. By taking this approach, you'll focus on building strong authentication, authorization, and encryption throughout, while providing compartmentalized access and better operational agility. Understand how perimeter-based defenses have evolved to become the broken model we use today Explore two case studies of zero trust in production networks on the client side (Google) and on the server side (PagerDuty) Get example configuration for open source tools that you can use to build a zero trust network Learn how to migrate from a perimeter-based network to a zero trust network in production

Computer System and Network Security provides the reader with a basic understanding of the issues involved in the security of computer systems and networks. Introductory in nature, this important new book covers all aspects related to the growing field of computer security. Such complete coverage in a single text has previously been unavailable, and college professors and students, as well as professionals responsible for system security, will find this unique book a valuable source of information, either as a textbook or as a general reference. Computer System and Network Security discusses existing and potential threats to computer systems and networks and outlines the basic actions that are generally taken to protect them. The first two chapters of the text introduce the reader to the field of computer security, covering fundamental issues and objectives. The next several chapters describe security models, authentication issues, access control, intrusion detection, and damage control. Later chapters address network and database security and systems/networks connected to wide-area networks and internetworks. Other topics include firewalls, cryptography, malicious software, and security standards. The book includes case studies with information about incidents involving computer security, illustrating the problems and potential damage that can be caused when security fails. This unique reference/textbook covers all aspects of computer and network security, filling an obvious gap in the existing literature.

This fully revised and updated new edition of the definitive text/reference on computer network and information security presents a comprehensive guide to the repertoire of security tools, algorithms and best practices mandated by the technology we depend on. Topics and features: highlights the magnitude of the vulnerabilities, weaknesses and loopholes inherent in computer networks; discusses how to develop effective security solutions, protocols, and best practices for the modern computing environment; examines the role of legislation, regulation, and enforcement in securing computing and mobile systems; describes the burning security issues brought about by the advent of the Internet of Things and the eroding boundaries between enterprise and home networks (NEW); provides both quickly workable and more thought-provoking exercises at the end of each chapter, with one chapter devoted entirely to hands-on exercises; supplies additional support materials for instructors at an associated website.

Keeping this high-performance communication technology from being detrimental to your technologically-clever future self... Do you feel insecure about the extent of your computer knowledge and find it difficult to contribute anything useful in a conversation about technology? In general, feel alien-like to you, as if it's something way past your time? The advancements made in technology have taken over how our society functions, and so there's no other way to deal with your shortcomings than to handle it head-on. According to TechCo, technology has influenced nearly every aspect of our daily lives, resulting in: Improved communication Improved forms of home entertainment Improved housing and lifestyle standards An altered healthy industry More convenient tools for education And last, but certainly not least: Easier travel, both short and long distances It's incredible to think there are people who have made all these things possible, yet, don't you want to know more about what's happening on the inside of it all? Start with computers. More specifically, computer networking. The next couple of questions swirling around in your head may now be, "Why computer networking? What even is computer networking exactly?" In a nutshell, it's a form of communication that allows for the sharing of resources from one device to another and without computer networking, none of the technology we have today could have been attained. Starting with the basics, you will be able to work your way up to become a computer whiz and be the one people turn to for computer advice. In Computer Networking, you will discover: The fundamental elements essential to creating your network, including why each of them is so important to your start-up A thorough explanation of the networking terms you need to know, written in plain English for easy comprehension How the Internet has had a revolutionary impact on our society, as well as what you can do to keep up with this undeniable part of our lives The best type of cable to use according to your networking needs The type of network you should not be using if you want to keep maintenance at its minimal level The 4 main types of wireless networks you should know, along with what factors can interfere with the consistency of these connections The #1 aspect of computer networking that can present a critical threat to your valuable data if not taken seriously And much more. Even if you are at the very bottom of the computer food chain, there's no point in staying there. Technology will continue to advance whether you'd like it to or not, so you better jump on board before it's too late. Knowing your way around computers and how to utilize it for communication is a skill set required at almost every workplace you can find in the modern world, yet that fact is not something you should fear. Use it rather for motivation. The more skill sets you develop, the more opportunities you open for yourself. So with that being said, there's no better time than the present to begin your journey towards a well-informed, technologically-gifted you. Join the other side and finally be the one who's able to correct others about their computer knowledge.... If you want to overcome your computer phobia and discover the endless opportunities computer networking has in store, then scroll up and click the "Add to Cart" button right now.

Theory and Practice

A Guide to Understanding Communications Systems, Internet Connections, and Network Security Along with Protection from Hacking and Cyber Security Threats

The Fat-Free Guide to Network Scanning

The Complete Guide to Computer Network Basics, Wireless Technology and Network Security

Guide to Computer Network Security

Study Companion

The Computer Network Infrastructure and Computer Security, Cybersecurity Laws, Internet of Things (IoT), and Mobile Devices

If you want to know the basics of wireless technology and how you can set up networks and solve the security threats, then keep reading... Whether you want to know how to build a large network or a small one, you always have to start from the basics and this book is full of information in this respect. Anything and everything that you need to know about the world of wireless networks is present in this book. The book has been written keeping in mind all the latest upgrades so that you can stay updated on the facts. It has been composed to serve as a comprehensive guide for all beginners. In this book, you will find that there is a gradual progression towards the more technical aspects of the wireless network so that you can develop a good grip on the preliminary subjects before moving into the depths. Here is a summarized version of all the key points which have been mentioned in this book: Different aspects of wireless networks, their applications, and importance A brief introduction to the world of internet Ways in which you can deal with the common security threats and troubleshooting your Wi-Fi connection Strategies to secure your network from all types of breaches Some common types of wireless networks Even if you are not aware of the basics, don't worry as this book is meant especially for the first-timers and you will start knowing everything right from the beginning. So, stop stressing as all you need to do is take the first step and everything will be laid out in front of you. Now, it's time for you to gear up and brush up on your computer networking skills. All the basic terminologies have been explained too and so there is nothing to feel intimidated about. Are you ready to learn how you can build and secure your network too? All you have to do is scroll up and click on the Buy Now button!

Current, essential IT networking skills--made easy! Thoroughly revised to cover the latest technologies, this practical resource provides you with a solid foundation in networking fundamentals. Networking: A Beginner's Guide, Sixth Edition discusses wired and wireless network design, configuration, hardware, protocols, security, backup, recovery, and virtualization. You'll also get step-by-step instructions for installing, configuring, and managing Windows Server 2012, Exchange Server 2013, Oracle Linux, and Apache. This is the perfect book for anyone starting a networking career or in need of an easy-to-follow refresher. Understand network cabling, topologies, hardware, and the OSI seven-layer model Connect with network protocols, such as TCP/IP, IPX/SPX, SMTP, DHCP, HTTP, WINS, and more Explore directory services, such as Microsoft's Active Directory, X.400, and LDAP Enable and support remote network access Secure your network and handle backup and disaster recovery Select, install, and manage reliable network servers, including Windows Server 2012, Exchange Server 2013, Oracle Linux, and Apache Manage network workstation computers Design a robust network from the ground up Work with virtualization technologies, such as Hyper-V, VMWare, and Oracle VM VirtualBox

Applied Network Security Monitoring is the essential guide to becoming an NSM analyst from the ground up. This book takes a fundamental approach to NSM, complete with dozens of real-world examples that teach you the key concepts of NSM. Network security monitoring is based on the principle that prevention eventually fails. In the current threat landscape, no matter how much you try, motivated attackers will eventually find their way into your network. At that point, it is your ability to detect and respond to that intrusion that can be the difference between a small incident and a major disaster. The book follows the three stages of the NSM cycle: collection, detection, and analysis. As you progress through each section, you will have access to insights from seasoned NSM professionals while being introduced to relevant, practical scenarios complete with sample data. If you've never performed NSM analysis, Applied Network Security Monitoring will give you an adequate grasp on the core concepts needed to become an effective analyst. If you are already a practicing analyst, this book will allow you to grow your analytic technique to make you more effective at your job. Discusses the proper methods for data collection, and teaches you how to become a skilled NSM analyst Provides thorough hands-on coverage of Snort, Suricata, Bro-IDS, SILK, and Argus Loaded with practical examples containing real PCAP files you can replay, and uses Security Onion for all its lab examples Companion website includes up-to-date blogs from the authors about the latest developments in NSM

Technology has gradually transitioned from wired to wireless over the years with tons of benefits. From the Internet of Things to wireless communication, we are all witnesses of the huge benefits of wireless technologies. This book covers various subjects and highlights both the benefits and challenges of wireless technologies. Topics: * Wireless Communication Technologies * Mobile Communication Systems * Wireless technology challenges * Network Protocols * Wireless Technology Security * Features of Secure Wireless Network Security * Security Issues in Wireless Networks * Wireless Network Computer Architecture * Cellular Wireless Networks * Communication Systems and Networks * Cisco Systems * Wireless Network Applications * Wired Network Components * Wireless Network Components * Network Security

Safe Computing in the Information Age

A Concise Module

Ultimate Guide To Ethical Hacking, Wireless Network, Cybersecurity With Practical Penetration Test On Kali Linux And System Security Practices

Computer Networking Hacking

Computers at Risk

Use and Analysis

Secure Computers and Networks

Are you looking for a complete guide to better manage a computer network? Here is the book for you! Computer network was created to connect individual computers to form a more powerful computing environment. In short, to increase productivity. From the age of batch processing to the age of computer networks, there is no doubt that this is the case that computer networks are intended to. Now, however, there seems to be a subtle shift in technology. One of the primary purposes of modern computer networks can be said to be to connect people. People around the world can connect, communicate and exchange ideas via the Internet. This, however, was not possible in the early days of computer networks. This human-to-human computer network has gradually brought about great changes in people's daily life, school education, Scientific Research, and company development. The wide areas of applications of wireless networks in modern times are an indication of what the technology will offer in the future. At the moment, wireless networks have simplified a lot of human activities such as communication, business transactions, and other activities. However, the future is brighter than most people can imagine. The modern wireless network will be child's play compared to what the future promises. Let's consider some of the major future development of wireless networks and the potential huge impact they will have on the users. In the wireless industry, there are top wireless carriers such as AT & T, Verizon, Sprint, and T-Mobile. These carriers have significantly contributed to the growth of this sector by introducing high-performance communication technologies that have proved invaluable to the growth and general acceptance of wireless communication. There are different types of wireless communication, such as satellite communication, IR wireless communication, microwave radio, and broadcast radio. This guide will cover the following topics: Virtual Private Networks (VPNs) Virtualization & Cloud Computing Connection-Oriented and Connectionless-Oriented Managing and Troubleshooting the Network Networking Macs and PCs Unified Communications and Virtualization Future protocols Switching The OSI and TCP/IP models The IP addresses and subnets Patch Panel or RJ45 Plugs Patch Panel Cabinet or Wall mounted Scanning the Network Wardriving and the Wireless Pirates... AND MORE! Buy this book NOW, you will acquire high and important information about computer networking!!!

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 ideal 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 new and 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

Guides Students in Understanding the Interactions between Computing/Networking Technologies and Security Issues Taking an interactive, "learn-by-doing" approach to teaching, Introduction to Computer and Network Security: Navigating Shades of Gray gives you a clear course to teach the technical issues related to security. Unlike most computer security books, which concentrate on software design and implementation, cryptographic tools, or networking issues, this text also explores how the interactions between hardware, software, and users affect system security. The book presents basic principles and concepts, along with examples of current threats to illustrate how the principles can either enable or neutralize exploits. Students see the importance of these concepts in existing and future technologies. In a challenging yet enjoyable way, they learn about a variety of technical topics, including current security exploits, technical factors that enable attacks, and economic and social factors that determine the security of future systems. Extensively classroom-tested, the material is structured around a set of challenging projects. Through staging exploits and choosing countermeasures to neutralize the attacks in the projects, students learn: How computer systems and networks operate How to reverse-engineer processes How to use systems in ways that were never foreseen (or supported) by the original developers Combining hands-on work with technical overviews, this text helps you integrate security analysis into your technical computing curriculum. It will educate your students on security issues, such as side-channel attacks, and deepen their understanding of how computers and networks work.

If a network is not secure, how valuable is it? Introduction to Computer Networks and Cybersecurity takes an integrated approach to networking and cybersecurity, highlighting the interconnections so that you quickly understand the complex design issues in modern networks. This full-color book uses a wealth of examples and illustrations to effectively

Computer Networking

Application of Big Data, Blockchain, and Internet of Things for Education Informatization

Computer Security

Privacy and Security

Principles and Practice

Computer Network Security

Computer Networking Problems and Solutions

Do you want to find out how a computer network works? Do you want to understand what it all takes to keep a home or office network up and running? This book is all you need! It will help you navigate your way to becoming proficient with network fundamentals and technology. When the first computers were built during the Second World War, they were expensive and isolated. However, after about twenty years, as their prices gradually decreased, the first experiments began to connect computers together. At the time, sharing them over a long distance was an interesting idea. Computers and the Internet have changed this world and our lifestyle forever. We just need to touch a small button and within a fraction of a second, we can make a call, send a file or video message.

The major factor that lies behind this advanced technology is none other than computer network. That's why it's important to know how it works! Networking for Beginners covers the following topics: Networking Basics - This chapter considers the needs of a real beginner in computer networking and covers the following crucial topics: definition of computer networking, types of computer networks, network topologies, and network architecture. Network Hardware - A comprehensive discussion on different network components that include routers, hubs, switches, etc. Network Cabling - This chapter discusses the different cabling standards include coaxial, fiber optic cable, and twisted-pair copper cable. Wireless Networking - Fundamental technicalities of wireless technology that is of great significance to the entire computer networking discipline. This chapter offers important information on how to set up and configure a computer for wireless connectivity. IP Addressing - This chapter pays great attention to the basics of IP addressing, and the different number systems (binary, decimal, and hexadecimal) IP Subnetting - Introduction to concepts of subnetting. Network Protocols - Various protocols of the TCP/IP suite. Internet Essentials - Different terminologies regarding the Internet, the worldwide web, and the history of the Internet. Virtualization in cloud computing - Concept of virtualization, its relevance in computer networking, and an examination of cloud services. Network Troubleshooting - This chapter considers troubleshooting as a top management function. NETWORKING FOR BEGINNERS is an easy-to-read book for anyone hungry for computer networking knowledge. The language used is simple, and even the very technical terms that pop from time to time have been explained in a way that is easy to understand.

Do you want to learn how to set up a new network for your home or business place and get the best performance of your network? Do you want to learn about Network Mode Security? If so then keep reading. In this tech-savvy world of today, everyone is looking out for speed in their life. There were days when a single message used to take many days to get delivered to the recipient. Today,

with the advent of networking and the internet, people can easily send out data packets of their need. The various forms of internet communication have also changed the whole concept of communication across a long distance. Networking has adapted the concepts of wireless functioning which have helped in wiping out various redundancies. The wired form of network is still in use owing to its special features and working capabilities. Networking is a complex concept and if done right it can do wonders. Having a brief overview of the networking concepts is very essential for setting up a new network or for improving the functionality of an existing network. The chapters of this book have been arranged in a very unique way that will provide you with the answers to all your questions regarding networking and all that you need for creating a new network. You will learn: The basic format of networking The successful networking processes The master controller who holds all necessary information required by the recipient The necessary components of networking The types of networks Wireless Networking Peer to Peer Connection OSI Model Network Mode Security Circuit and Packet Switching FTP - File Transfer Protocol ...and more! You need to start from the very beginning in order to set up a brand new network. It might turn out to be a tiresome job but try to stay attentive at each and every step you take as even a slight mistake or error can make a network non-functional. So, if you are interested in the various aspects of Networking along with its various components, Networking for Beginners: The Complete Guide to Computer Network Basics, Wireless Technology and Network Security is something that you really need to possess. Scroll up and click the Buy Now button and feel like a master of networking within a few days!

The classic guide to network security--now fully updated!"Bob and Alice are back!" Widely regarded as the most comprehensive yet comprehensible guide to network security, the first edition of Network Security received critical acclaim for its lucid and witty explanations of the inner workings of network security protocols. In the second edition, this most distinguished of author teams draws on hard-won experience to explain the latest developments in this field that has become so critical to our global network-dependent society. Network Security, Second Edition brings together clear, insightful, and clever explanations of every key facet of information security, from the basics to advanced cryptography and authentication, secure Web and email services, and emerging security standards. Coverage includes: All-new discussions of the Advanced Encryption Standard (AES), IPsec, SSL, and Web security Cryptography; In-depth, exceptionally clear introductions to secret and public keys, hashes, message digests, and other crucial concepts Authentication; Proving identity across networks, common attacks against authentication systems, authenticating people, and avoiding the pitfalls of authentication handshakes Core Internet security standards: Kerberos 4/5, IPsec, SSL, PKIX, and X.509 Email security; Key elements of a secure email system-plus detailed coverage of PEM, S/MIME, and PGP Web security; Security issues associated with URLs, HTTP, HTML, and cookies Security implementations in diverse platforms, including Windows, NetWare, and Lotus Notes The authors go far beyond documenting standards and technology: They contrast competing schemes, explain strengths and weaknesses, and identify the crucial errors most likely to compromise secure systems. Network Security will appeal to a wide range of professionals, from those who design or evaluate security systems to system administrators and programmers who want a better understanding of this important field. It can also be used as a textbook at the graduate or advanced undergraduate level.

Reflecting the latest trends and developments from the information security field, best-selling Security+ Guide to Network Security Fundamentals, Fourth Edition, provides a complete introduction to practical network and computer security and maps to the CompTIA Security+ SY0-301 Certification Exam. The text covers the fundamentals of network security, including compliance and operational security, threats and vulnerabilities; application, data, and host security; access control and identity management; and cryptography. The updated edition includes new topics, such as psychological approaches to social engineering attacks, Web application attacks, penetration testing, data loss prevention, cloud computing security, and application programming development security. The new edition features activities that link to the Information Security Community Site, which offers video lectures, podcats, discussion boards, additional hands-on activities and more to provide a wealth of resources and up-to-the minute information. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Computer Networking The Complete Guide

Computer Networks

Building Secure Systems in Untrusted Networks

Network Security

Computer Networking First-Step

Zero Trust Networks

Computer Networking Essentials

The ultimate hands-on guide to IT security and proactive defense The Network Security Test Lab is a hands-on, step-by-step guide to ultimate IT security implementation. Covering the full complement of malware, viruses, and other attack technologies, this essential guide walks you through the security assessment and penetration testing process, and provides the set-up guidance you need to build your own security-testing lab. You'll look inside theatrical attacks to decode their methods, and learn how to run attacks in an isolated sandbox to better understand how attacker-target systems, and how to build the defenses that stop them. You'll be introduced to tools like Wireshark, NetworkMiner, Nmap, Metasploit, and more as you discover techniques for defending against network attacks, social networking bugs, malware, and the most prevalent malicious traffic. You also get access to open-source tools, demo software, and a bootable version of Linux to facilitate hands-on learning and help you implement your new skills. Security technology continues to evolve, and yet not a week goes by without news of a new security breach or a new exploit being released. The Network Security Test Lab is the ultimate guide when you are on the front lines of defense, providing the most up-to-date methods of thwarting would-be attackers. Get acquainted with your hardware, gear, and test platform Learn how attackers penetrate existing security systems Detect malicious activity and build effective defenses Investigate and analyze attacks to inform defense strategy The Network Security Test Lab is your complete, essential guide.

Buy the Paperback version of this book, and get the Kindle eBook version included for FREE Do you want to make a career in an exciting and rewarding field like computer management? Are you interested in training for a job that helps in manipulating the normal behaviour of the network connections, in order to provide help for a noble cause? The truth is: Computer networking is a field which is always evolving. It requires the help of a well-researched study of the operating systems and network configurations to excel in them. True hacking once referred to activities which were meant for good intentions. Malicious things done to impose an attack on the computer networks were officially known as cracking. Protecting a network and the various devices or computers attached to it from phishing, Trojans, unauthorized access and malware is a very important job and requires much practice and knowledge. DOWNLOAD: Computer Networking Hacking, Ultimate Guide to Ethical Hacking, Wireless Network, Cyber security with Practical Penetration Test on Kali Linux and System Security Practices. Programming skills are something which every hacker should have. Other than the programming skills, a good hacker should also know networking skills to become an effective hacker. He should know how to employ the internet and the search engines to his best use. The goal of the book is simple: the eBook is the ultimate guide to ethical hacking. It provides a complete knowledge about hacking, its types, getting started with ethical hacking, wireless network hacking, installing and using Kali Linux, virtualizing machines and description of the main programs which are used in the world. The book also stresses on Ultimate Guide to Ethical Hacking, Wireless Network, and Cyber security with Practical Penetration Test on Kali Linux and System Security Practices. You will also learn: History of hacking What is hacking and the differences between hacking and cracking Types of hacking to combat brute force, ransomware, network attacks, dos, ddos, phishing, tabnapping, web attack and social engineering. How to start with ethical hacking? Wireless network hacking and testing the system. Also understanding the various threats in the wireless networks. encryption and password security, wep, wpa, wpa2, wpa3, all type off attack on those password practical example to make keylogger, gain access on remote machine, client/server hack Best practices to make a system secure practical example to configure a real network and make secure(switch, router, firewall etc Scripting Backup and restore a network Sandbox attack prevention methods Best practices to stay safe online Would you like to know more? Download the eBook, Computer Networking Hacking, immediately to know more about ethical hacking. Scroll to the top of the page and select the buy now button.

Essential Computer Security provides the vast home user and small office computer market with the information they must know in order to understand the risks of computing on the Internet and what they can do to protect themselves. Tony Bradley is the Guide for the About.com site for Internet Network Security. In his role managing the content for a site that has over 600,000 page views per month and a weekly newsletter with 25,000 subscribers, Tony has learned how to talk to people, everyday people, about computer security. Intended for the security illiterate, Essential Computer Security is a source of jargon-less advice everyone needs to operate their computer securely. * Written in easy to understand non-technical language that novices can comprehend * Provides detailed coverage of the essential security subjects that everyone needs to know * Covers just enough information to educate without being overwhelming

Hacking the Hacker: A Practical Guide to Computer Security, Second Edition combines unique insight into the mind of the hacker with practical, step-by-step countermeasures for protecting any HP-UX, Linux, or UNIX system. Fully updated for today's key threats, tools, and solutions, this book shows you how hackers work and the best ways to respond: not just what to do, but why. Through dozens of real-world examples, you'll master the skills and mindset to protect yourself against today's attacks -- and tomorrow's.

Hacking the Hacker:

Collection, Detection, and Analysis

Introduction to Computer and Network Security

Private Communications in a Public World

Introduction to Computer Networks and Cybersecurity

A Complete Guide to Manage Computer Networks and to Learn Wireless Technology, Cisco CCNA, IP Subnetting and Network Security

Applied Network Security Monitoring

*An introduction to the social and policy issues which have arisen as a result of IT. Whilst it assumes a modest familiarity with computers, the book provides a guide to the issues suitable for undergraduates. In doing so, the author prompts students to consider questions such as: * How do morality and the law relate to each other? * What should be covered in a professional code of conduct for information technology professionals? * What are the ethical issues relating to copying software? * Is electronic monitoring of employees wrong? * What are the moral codes of cyberspace? Throughout, the book shows how in many ways the technological development is outpacing the ability of our legal systems, and how different paradigms applied to ethical questions often proffer conflicting conclusions. As a result, students will find this a thought-provoking and valuable survey of the new and difficult ethical questions posed by the Internet, artificial intelligence, and virtual reality.*

"Computer Networking Essentials" starts with an introduction to networking concepts. Readers learn computer networking terminology and history, and then dive into the technical concepts involved in sharing data across a computer network.

Original textbook (c) October 31, 2011 by Olivier Bonaventure, is licensed under a Creative Commons Attribution (CC BY) license made possible by funding from The Saylor Foundation's Open Textbook Challenge in order to be incorporated into Saylor's collection of open courses available at: <http://www.saylor.org>. Free PDF 282 pages at <https://www.textbookequity.org/bonaventure-computer-networking-principles-protocols-and-practice/> This open textbook aims to fill the gap between the open-source implementations and the open-source network specifications by providing a detailed but pedagogical description of the key principles that guide the operation of the Internet. 1 Preface 2 Introduction 3 The application Layer 4 The transport layer 5 The network layer 6 The datalink layer and the Local Area Networks 7 Glossary 8 Bibliography

This timely textbook presents a comprehensive guide to the core topics in cybersecurity, covering issues of security that extend beyond traditional computer networks to the ubiquitous mobile communications and online social networks that have become part of our daily lives. In the context of our growing dependence on an ever-changing digital ecosystem, this book stresses the importance of security awareness, whether in our homes, businesses, or public spaces. This fully updated new edition features new material on the security issues raised by blockchain technology, and its use in logistics, digital ledgers, payments systems, and digital contracts. Topics and features: Explores the full range of security risks and vulnerabilities in all connected digital systems Inspires debate over future developments and improvements necessary to enhance the security of personal, public, and private enterprise systems Raises thought-provoking questions regarding legislative, legal, social, technical, and ethical challenges, such as the tension between privacy and security Describes the fundamentals of traditional computer network security, and common threats to security Reviews the current landscape of tools, algorithms, and professional best practices in use to maintain security of digital systems Discusses the security issues introduced by the latest generation of network technologies, including mobile systems, cloud computing, and blockchain Presents exercises of varying levels of difficulty at the end of each chapter, and concludes with a diverse selection of practical projects Offers supplementary material for students and instructors at an associated website, including slides, additional projects, and syllabus suggestions This important textbook/reference is an invaluable resource for students of computer science, engineering, and information management, as well as for practitioners working in data- and information-intensive industries.

A Practical Guide to Computer Security

Essential Computer Security: Everyone's Guide to Email, Internet, and Wireless Security

First EA1 International Conference, BigIoT-EDU 2021, Virtual Event, August 1-3, 2021, Proceedings, Part II

A Step-by-Step Guide

An All-in-One Beginner's Guide to Understanding Communications Systems, Network Security, Internet Connections, Cybersecurity and Hacking

Navigating Shades of Gray

An innovative approach to building resilient, modern networks

This text introduces a complete and concise view of network security. It provides in-depth theoretical coverage of recent advancements and practical solutions to network security threats, including the most recent topics on wireless network security.

Computer Security: Principles and Practice, 2e, is ideal for courses in Computer/Network Security. In recent years, the need for education in computer security and related topics has grown dramatically - and is essential for anyone studying Computer Science or Computer Engineering. This is the only text available to provide integrated, comprehensive, up-to-date coverage of the broad range of topics in this subject. In addition to an extensive pedagogical program, the book provides unparalleled support for both researchers and students. Authors Association named Computer Security: Principles and Practice, 1e, the winner of the Textbook Excellence Award for the best Computer Science textbook of 2008.

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 new examples, 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: security: and network management. This book is ideal 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 applications. This book is also a valuable resource for 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.

*This book reviews methodologies in computer network simulation and modeling, illustrates the benefits of simulation in computer networks design, modeling, and analysis, and identifies the main issues that face efficient and effective computer network simulation"--Provided by publisher.

Simulation in Computer Network Design and Modeling: Use and Analysis

Green Computing in Network Security

Security+ Guide to Network Security Fundamentals

Networking for Beginners

Ethics in Computing

Networking: A Beginner's Guide, Sixth Edition

Analysis, Design, and Implementation

Cybercrime and Information Technology: Theory and Practice—The Computer Network Infrastructure and Computer Security, Cybersecurity Laws, Internet of Things (IoT), and Mobile Devices is an introductory text addressing current technology, trends, and security issues. While many books on the market cover investigations, forensic recovery, and presentation of evidence, and others explain computer and network security, this book explores both, explaining the essential principles governing computers, wireless and mobile devices, the Internet of Things, cloud systems, and their significant vulnerabilities. Only with this knowledge can students truly appreciate the security challenges and opportunities for cybercrime that cannot be uncovered, investigated, and adjudicated unless they are understood. The legal portion of the book is an overview of the legal system in the United States, including cyberlaw standards, and regulations affecting cybercrime. This section includes cases in progress that are shaping and developing legal precedents. As is often the case, new technologies require new statutes and regulations—something the law is often slow to move on given the current speed in which technology advances. Key Features: Provides a strong foundation of cybercrime knowledge along with the core concepts of networking, computer security, Internet of Things (IoT), and mobile devices. Addresses legal statutes and precedents fundamental to understanding investigative and forensic issues relative to evidence collection and preservation. Identifies the new security challenges of emerging technologies including mobile devices, cloud computing, Software-as-a-Service (SaaS), VMware, and the Internet of Things. Strengthens student understanding of the fundamentals of computer and network security, concepts that are often glossed over in many textbooks, and includes the study of cybercrime as critical forward-looking cybersecurity challenges. Cybercrime and Information Technology is a welcome addition to the literature, particularly for those professors seeking a more hands-on, forward-looking approach to technology and trends. Coverage is applicable to all forensic science courses in computer science and forensic programs, particularly those housed in criminal justice departments emphasizing digital evidence and investigation processes. The textbook is appropriate for courses in the Computer Forensics and Criminal Justice curriculum, and is relevant to those studying Security Administration, Public Administrations, Police Studies, Business Administration, Computer Science, and Information Systems. An Instructor's Manual with Test Bank and chapter PowerPoint slides is available to qualified professors for use in classroom instruction.

This comprehensive guide exposes the security risks and vulnerabilities of computer networks and networked devices, offering advice on developing improved algorithms and best practices for enhancing system security. Fully revised and updated, this new edition embraces a broader view of computer networks that encompasses agile mobile systems and social networks. Features: provides supporting material for lecturers and students, including an instructor's manual, slides, solutions, and laboratory materials; includes both quick and more thought-provoking exercises at the end of each chapter; devotes an entire chapter to laboratory exercises; discusses flaws and vulnerabilities in computer network infrastructures and protocols; proposes practical and efficient solutions to security issues; explores the role of legislation, regulation, and law enforcement in maintaining computer and computer network security; examines the impact of developments in virtualization, cloud computing, and mobile systems.

Computers at Risk presents a comprehensive agenda for developing nationwide policies and practices for computer security. Specific recommendations are provided for industry and for government agencies engaged in computer security activities. The volume also outlines problems and opportunities in computer security research, recommends ways to improve the research infrastructure, and suggests topics for investigators. The book explores the diversity of the field, the need to engineer countermeasures based on speculation of what experts think computer attackers may do next, why the technology community has failed to respond to the need for enhanced security systems, how innovators could be encouraged to bring more options to the marketplace, and balancing the importance of security against the right of privacy.

The Nmap 6 Cookbook provides simplified coverage of network scanning features available in the Nmap suite of utilities. Every Nmap feature is covered with visual examples to help you quickly understand and identify proper usage for practical results.Topics covered include: Installation on Windows, Mac OS X, and Unix/Linux platforms* Basic and advanced scanning techniques* Network inventory and auditing* Firewall evasion techniques* Zenmap - A graphical front-end for Nmap* NSE - The Nmap Scripting Engine* Ndiff - The Nmap scan comparison utility* Ncat - A flexible networking utility* Nping - Ping on steroids*

Energy Efficient Solutions for Business and Home

The Complete Guide to Understanding Wireless Technology, Network Security, Computer Architecture and Communications Systems (Including Cisco, CCNA and CCENT)

Nmap 6 Cookbook

Cybercrime and Information Technology

Computer System and Network Security

A Systems Approach

Principles, Protocols and Practice

This book focuses on green computing-based network security techniques and addresses the challenges involved in practical implementation. It also explores the idea of energy-efficient computing for network and data security and covers the security threats involved in social networks, data centers, IoT, and biomedical applications. Green Computing in Network Security: Energy Efficient Solutions for Business and Home includes analysis of green-security mechanisms and explores the role of green computing for secured modern internet applications. It discusses green computing-based distributed learning approaches for security and emphasizes the development of green computing-based security systems for IoT devices. Written with researchers, academic libraries, and professionals in mind so they can get up to speed on network security, the challenges, and implementation processes.

This book primarily focuses on providing deep insight into the concepts of network security, network forensics, botnet forensics, ethics and incident response in global perspectives. It also covers the dormant and contentious issues of the subject in most scientific and objective manner. Various case studies addressing contemporary network forensics issues are also included in this book to provide practical know – how of the subject. Network Forensics: A Privacy & Security provides a significance knowledge of network forensics in different functions and spheres of the security. The book gives the complete knowledge of network security, all kind of network attacks, intention of an attacker, identification of attack, detection, its analysis, incident response, ethical issues, botnet and botnet forensics. This book also refer the recent trends that comes under network forensics. It provides in-depth insight to the dormant and latent issues of the acquisition and system live investigation too. Features: Follows an outcome-based learning approach. A systematic overview of the state-of-the-art in network security, tools, Digital forensics. Differentiation among network security, computer forensics, network forensics and botnet forensics. Discussion on various cybercrimes, attacks and cyber terminologies. Discussion on network forensics process model. Network forensics tools and different techniques Network Forensics analysis through case studies. Discussion on evidence handling and incident response. System Investigations and the ethical issues on network forensics. This book serves as a reference book for post graduate and research investigators who need to study in cyber forensics. It can also be used as a textbook for a graduate level course in Electronics & Communication, Computer Science and Computer Engineering.

This updated guide presents expert information on analyzing, designing, and implementing all aspects of computer network security. Based on the authors' earlier work, Computer System and Network Security, this new book addresses important concerns regarding network security. It contains new chapters on World Wide Web security issues, secure electronic commerce, incident response, as well as two new appendices on PGP and UNIX security fundamentals.

The book provides the reader with a one-stop highway to learning about the fundamentals of computer networking, Internet connectivity, cybersecurity, and hacking.

Computer Networking and Cybersecurity

Network Forensics

The Complete Beginner's Guide to Learning the Basics of Network Security, Computer Architecture, Wireless Technology and Communications Systems (Including Cisco, CCENT, and CCNA)

Ethical and Social Issues in the Information Age

An Introductory Guide to Understanding Wireless and Cloud Technology, Basic Communications Services and Network Security for Beginners

The Network Security Test Lab

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 textbook raises thought-provoking questions regarding our rapidly-evolving computing technologies, highlighting the need for a strong ethical framework in our computer science education. Ethics in Computing offers a concise introduction to this topic, distilled from the more expansive Ethical and Social Issues in the Information Age. Features: introduces the philosophical framework for analyzing computer ethics; describes the impact of computer technology on issues of security, privacy and anonymity; examines intellectual property rights in the context of computing; discusses such issues as the digital divide, employee monitoring in the workplace, and health risks; reviews the history of computer crimes and the threat of cyberbullying; provides coverage of the ethics of AI, virtualization technologies, virtual reality, and the Internet; considers the social, moral and ethical challenges arising from social networks and mobile communication technologies; includes discussion questions and exercises.