Malware Rootkits Botnets A Beginner S Guide

This book is an introduction to both offensive and defensive techniques of cyberdeception. Unlike most books on cyberdeception, this book focuses on methods rather than detection. It treats cyberdeception techniques that are current, novel, and practical, and that go well beyond traditional honeypots. It contains features friendly for classroom use: (1) minimal use of programming details and mathematics, (2) modular chapters that can be covered in many orders, (3) exercises with each chapter, and (4) an extensive reference list.Cyberattacks have grown serious enough that understanding and using deception is essential to safe operation in cyberspace. The deception techniques covered are impersonation, delays, fakes, camouflage, false excuses, and social engineering. Special attention is devoted to cyberdeception in industrial control systems and within operating systems. This material is supported by a detailed discussion of how to plan deceptions and calculate their detectability and effectiveness. Some of the chapters provide further technical details of specific deception techniques and their application. Cyberdeception can be conducted ethically and efficiently when necessary by following a few basic principles. This book is intended for advanced undergraduate students and graduate students, as well as computer professionals learning on their own. It will be especially useful for anyone who helps run important and essential computer systems such as critical-infrastructure and military systems.

Security Smarts for the Self-Guided IT Professional Learn how to improve the security posture of your organization and defend against some of the most pervasive network attacks. Malware, Rootkits & Botnets: A Beginner's Guide explains the nature, sophistication, and danger of these risks and offers best practices for thwarting them. After reviewing the current threat landscape, the book describes the entire threat lifecycle, explaining how cybercriminals create, deploy, and manage the malware, rootkits, and botnets under their control. You'll learn proven techniques for identifying and mitigating these malicious attacks. Templates, checklists, and examples give you the hands-on help you need to get started protecting your network right away. Malware, Rootkits & Botnets: A Beginner's Guide features: Lingo--Common security terms defined so that you're in the know on the job IMHO--Frank and relevant opinions based on the author's years of industry experience Budget Note--Tips for getting security technologies and processes into your organization's budget In Actual Practice--Exceptions to the rules of security explained in real-world contexts Your Plan--Customizable checklists you can use on the job now Into Action--Tips on how, why, and when to apply new skills and techniques at work

This book provides solid, state-of-the-art contributions from both scientists and practitioners working on botnet detection and analysis, including botnet economics. It presents original theoretical and empirical chapters dealing with both offensive and defensive aspects in this field. Chapters address fundamental theory, current trends and techniques for evading detection, as well as practical experiences concerning detection and defensive strategies for the botnet ecosystem, and include surveys, simulations, practical results, and case studies.

Fundamentals of Information Systems Security, Fourth Edition provides a comprehensive overview of the essential concepts readers must know as they pursue careers in information systems security.

Wanneer Barry Fairbrother onverwacht sterft, zijn de bewoners van Pagford geschokt. Pagford is ogenschijnlijk een idyllisch Engels plattelandsdorp, met een charmant marktplein en een oude abdij, maar achter die fraaie façade gaan grote conflicten schuil. Tussen rijk en arm, tieners en hun ouders, vrouwen en hun echtgenoten, leraren en hun leerlingen... In Pagford is niets wat het lijkt. De lege stoel die Barry achterlaat in de gemeenteraad is de aanleiding tot de grootste strijd die het dorp ooit heeft gekend. Wie zal zegevieren in deze verkiezingen vol opportunisme, valsheid en schokkende onthullingen?

Eleventh Hour Network+: Exam N10-004 Study Guide offers a practical guide for those preparing for the Security+ certification exam. The book's 14 chapters provide in-depth discussions of the following topics: systems security; operating system hardening; application security; virtualization technologies; network security; wireless networks; network access; network authentication; risk assessment and risk mitigation; general cryptographic concepts; public key infrastructure; redundancy planning; environmental controls and implementing disaster recovery and incident response procedures; and legislation and organizational policies. Each chapter includes information on exam objectives, exam warnings, and the top five toughest questions along with their answers. The only book keyed to the new SY0-201 objectives that has been crafted for last minute cramming Easy to find, essential material with no fluff – this book does not talk about security in general, just how it applies to the test Includes review of five toughest questions by topic - sure to improve your score

Computer security touches every part of our daily lives from our computers and connected devices to the wireless signals around us. Breaches have real and immediate financial, privacy, and safety consequences. This handbook has compiled advice from top professionals working in the real world about how to minimize the possibility of computer security breaches in your systems. Written for professionals and college students, it provides comprehensive best guidance about how to minimize hacking, fraud, human error, the effects of natural disasters, and more. This essential and highly-regarded reference maintains timeless lessons and is fully revised and updated with current information on security issues for social networks, cloud computing, virtualization, and more.

Move beyond the foundations of machine learning and game theory in cyber security to the latest research in this cutting-edge field In Game Theory and Machine Learning for Cyber Security, a team of expert security researchers delivers a collection of central research contributions from both machine learning and game theory applicable to cybersecurity. The distinguished editors have included resources that address open research questions in game theory and machine learning applied to cyber security systems and examine the strengths and limitations of current game theoretic models for cyber security. Readers will explore the vulnerabilities of traditional machine learning algorithms and how they can be mitigated in an adversarial machine learning approach. The book offers a comprehensive suite of solutions to a broad range of technical issues in applying game theory and machine learning to solve cyber security challenges. Beginning with an introduction to foundational concepts in game theory, machine learning, cyber security, and cyber deception, the editors provide readers with resources that discuss the latest in hypergames, behavioral game theory, adversarial machine learning, generative adversarial networks, and multi-agent reinforcement learning. Readers will also enjoy: A thorough introduction to game theory for cyber deception, including scalable algorithms for identifying stealthy attackers in a game theoretic framework, honeypot allocation over attack graphs, and behavioral games for cyber deception An exploration of game theory for cyber security, including actionable game-theoretic adversarial intervention detection against persistent and advanced threats Practical discussions of adversarial machine learning for cyber security, including adversarial machine learning in 5G security and machine learning-driven fault injection in cyber-physical systems In-depth examinations of generative models for cyber security Perfect for researchers, students, and experts in the fields of computer science and engineering, Game Theory and Machine Learning for Cyber Security is also an indispensable resource for industry professionals, military personnel, researchers, faculty, and students with an interest in cyber security.

Effective communication requires a common language, a truth that applies to science and mathematics as much as it does to culture and conversation. Standards and Standardization: Concepts, Methodologies, Tools, and Applications addresses the necessity of a common system of measurement in all technical communications and endeavors, in addition to the need for common rules and guidelines for regulating such enterprises. This multivolume reference will be of practical and theoretical significance to researchers, scientists, engineers, teachers, and students in a wide array of disciplines.

Updated annually to keep up with the increasingly fast pace of change in the field, the Information Security Management Handbook is the single most comprehensive and up-to-date resource on information security (IS) and assurance. Facilitating the up-to-date understanding required of all IS professionals, the Information Security Management Handbook

As the world has adapted to the age of digital technology, present day business leaders are required to change with the times as well. Addressing and formatting their business practices to not only encompass digital technologies, but expand their capabilities, the leaders of today must be flexible and willing to familiarize themselves with all types of global business practices. Global Business Leadership Development for the Fourth Industrial Revolution is a collection of advanced research on the methods and tactics utilized to succeed as a leader in the digital age. While highlighting topics including data privacy, corporate governance, and risk management, this book is ideally designed for business professionals, administrators, managers, executives, researchers, academicians, and business students who want to improve their understanding of the strategic role of digital technologies in the global economy, in networks and organizations, in teams and work groups, in information systems, and at the level of individuals as actors in digitally networked environments

The ultimate CISA prep guide, with practice exams Sybex's CISA: Certified Information Systems Auditor Study Guide, Fourth Edition is the newest edition of industry-leading study guide for the Certified Information System Auditor exam, fully updated to align with the latest ISACA standards and changes in IS auditing. This new edition provides complete guidance toward all content areas, tasks, and knowledge areas of the exam and is illustrated with real-world examples. All CISA terminology has been revised to reflect the most recent interpretations, including 73 definition and nomenclature changes. Each chapter summary highlights the most important topics on which you'll be tested, and review questions help you gauge your understanding of the material. You also get access to electronic flashcards, practice exams, and the Sybex test engine for comprehensively thorough preparation. For those who audit, control, monitor, and assess enterprise IT and business systems, the CISA certification signals knowledge, skills, experience, and credibility that delivers value to a business. This study guide gives you the advantage of detailed explanations from a real-world perspective, so you can go into the exam fully prepared. Discover how much you already know by beginning with an assessment test Understand all content, knowledge, and tasks covered by the CISA exam Get more in-depths explanation and demonstrations with an all-new training video Test your knowledge with the electronic test engine, flashcards, review questions, and more The CISA certification has been a globally accepted standard of achievement among information systems audit, control, and security professionals since 1978. If you're looking to acquire one of the top IS security credentials, CISA is the comprehensive study guide you need.

The Basics of Cyber Safety: Computer and Mobile Device Safety Made Easy presents modern tactics on how to secure computer and mobile devices, including what behaviors are safe while surfing, searching, and interacting with others in the virtual world. The book's author, Professor John Sammons, who teaches information security at Marshall University, introduces readers to the basic concepts of protecting their computer, mobile devices, and data during a time that is described as the most connected in history. This timely resource provides useful information for readers who know very little about the basic principles of keeping the devices they are connected to—or themselves—secure while online. In addition, the text discusses, in a non-technical way, the cost of connectedness to your privacy, and what you can do to it, including how to avoid all kinds of viruses, malware, cybercrime, and identity theft. Final sections provide the latest information on safe computing in the workplace and at school, and give parents steps they can take to keep young kids and teens safe online. Provides the most straightforward and up-to-date guide to cyber safety for anyone who ventures online for work, school, or personal use Includes real world examples that demonstrate how cyber criminals commit their crimes, and what users can do to keep their data safe

Arm yourself for the escalating war against malware and rootkits Thwart debilitating cyber-attacks and dramatically improve your organization’s security posture using the proven defense strategies in this thoroughly updated guide. Hacking ExposedTM Malware and Rootkits: Security Secrets & Solutions, Second Edition fully explains the hacker’s latest methods alongside ready-to-deploy countermeasures. Discover how to block pop-up and phishing exploits, terminate embedded code, and identify and eliminate rootkits. You will get up-to-date coverage of intrusion detection, firewall, honeynet, antivirus, and anti-rootkit technology. • Learn how malware infects, survives, and propagates across an enterprise • See how hackers develop malicious code and target vulnerable systems • Detect, neutralize, and remove user-mode and kernel-mode rootkits • Use hypervisors and honeypots to uncover and kill virtual rootkits • Defend against keylogging, redirect, click fraud, and identity theft • Block spear phishing, client-side, and embedded-code exploits • Effectively deploy the latest antivirus, pop-up blocker, and firewall software • Identify and stop malicious processes using IPS solutions

You know by now that your company could not survive without the Internet. Not in today’s market. You are either part of the digital economy or reliant upon it. With critical information assets at risk, your company requires a state-of-the-art cybersecurity program. But how do you achieve the best possible program? Tari Schreider, in Building Effective Cybersecurity Programs: A Security Manager’s Handbook, lays out the step-by-step roadmap to follow as you build or enhance your cybersecurity program. Over 30+ years, Tari Schreider has designed and implemented cybersecurity programs throughout the world, helping hundreds of companies like yours. Building on that experience, he has created a clear roadmap that will allow the process to go more smoothly for you. Building Effective Cybersecurity Programs: A Security Manager’s Handbook is organized around the six main steps on the roadmap that will put your cybersecurity program in place: Design a Cybersecurity Program Establish a Foundation of Governance Build a Threat, Vulnerability Detection, and Intelligence Capability Build a Cyber Risk Management Capability Implement a Defense-in-Depth Strategy Apply Service Management to Cybersecurity Programs Because Schreider has researched and analyzed over 150 cybersecurity architectures, frameworks, and models, he has saved you hundreds of hours of research. He sets you up for success by talking to you directly as a friend and colleague, using practical examples. His book helps you to: Identify the proper cybersecurity program roles and responsibilities. Classify assets and identify vulnerabilities. Define an effective cybersecurity governance foundation. Evaluate the top governance frameworks and models. Automate your governance program to make it more effective. Integrate security into your application development process. Apply defense-in-depth as a multi-dimensional strategy. Implement a service management approach to implementing countermeasures. With this handbook, you can move forward confidently, trusting that Schreider is recommending the best components of a cybersecurity program for you. In addition, the book provides hundreds of citations and references allow you to dig deeper as you explore specific topics relevant to your organization or your studies.

The 28 revised full papers presented together with 8 short papers were carefully reviewed and selected from 44 submissions.Among the topical areas covered were: use of game theory; control theory; and mechanism design for security and privacy; decision making for cybersecurity and security requirements engineering; security and privacy for the Internet-of-Things; cyber-physical systems; cloud computing; resilient control systems, and critical infrastructure; pricing; economic incentives; security investments, and cyber insurance for dependable and secure systems; risk assessment and security risk management; security and privacy of wireless and mobile communications, including user location privacy; sociotechnological and behavioral approaches to security; deceptive technologies in cybersecurity and privacy; empirical and experimental studies with game, control, or optimization theory-based analysis for security and privacy; and adversarial machine learning and crowdsourcing, and the role of artificial intelligence in system security.

Decision making tools are essential for the successful outcome of any organization. Recent advances in predictive analytics have aided in identifying particular points of leverage where critical decisions can be made. Emerging Methods in Predictive Analytics: Risk Management and Decision Making provides an interdisciplinary approach to predictive analytics; bringing together the fields of business, statistics, and information technology for effective decision making. Managers, business professionals, and decision makers in diverse fields will find the applications and cases presented in this text essential in providing new avenues for risk assessment, management, and predicting the future outcomes of their decisions.

Provides information on how to identify, defend, and remove malware, rootkits, and botnets from computer networks.

Guarding against network intrusions requires the monitoring of network traffic for particular network segments or devices and analysis of network, transport, and application protocols to identify suspicious activity. This chapter provides a detailed discussion of network-based intrusion protection technologies. It contains a brief overview of the major components of network-based intrusion protection systems and explains the architectures typically used for deploying the components. It also examines the security capabilities of the technologies in depth, including the methodologies they use to identify suspicious activity. The rest of the chapter discusses the management capabilities of the technologies and provides recommendations for implementation and operation.

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.

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 effective

A one-of-a-kind guide to setting up a malware research lab, using cutting-edge analysis tools, and reporting the findings Advanced Malware Analysis is a critical resource for every information security professional's anti-malware arsenal. The proven troubleshooting techniques will give an edge to information security professionals whose job involves detecting, decoding, and reporting on malware. After explaining malware architecture and how it operates, the book describes how to create and configure a state-of-the-art malware research lab and gather samples for analysis. Then, you'll learn how to use dozens of malware analysis tools, organize data, and create metrics-rich reports. A crucial tool for combatting malware—which currently hits each second globally Filled with undocumented methods for customizing dozens of analysis software tools for very specific uses Leads you through a malware blueprint first, then lab setup, and finally analysis and reporting activities Every tool explained in this book is available in every country around the world

Cyber-crime increasingly impacts both the online and offline world, and targeted attacks play a significant role in disrupting services in both. Targeted attacks are those that are aimed at a particular individual, group, or type of site or service. Unlike worms and viruses that usually attack indiscriminately, targeted attacks involve intelligence-gathering and planning to a degree that drastically changes its profile. Individuals, corporations, and even governments are facing new threats from targeted attacks. Targeted Cyber Attacks examines real-world examples of directed attacks and provides insight into what techniques and resources are used to stage these attacks so that you can counter them more effectively. A well-structured introduction into the world of targeted cyber-attacks Includes analysis of real-world attacks Written by cyber-security researchers and experts

Malware, Rootkits & Botnets A Beginner's GuideMcGraw Hill Professional

This book is a multi-disciplinary analysis of cyber warfare, featuring contributions by leading experts from a mixture of academic and professional backgrounds. Cyber warfare, meaning interstate cyber aggression, is an increasingly important emerging phenomenon in international relations, with state-orchestrated (or apparently state-orchestrated) computer network attacks occurring in Estonia (2007), Georgia (2008) and Iran (2010). This method of waging warfare – given its potential to, for example, make planes fall from the sky or cause nuclear power plants to melt down – has the capacity to be as devastating as any conventional means of conducting armed conflict. Every state in the world now has a cyber-defence programme and over 120 states also have a cyber-attack programme. While the amount of literature on cyber warfare is growing within disciplines, our understanding of the subject has been limited by a lack of cross-disciplinary engagement. In response, this book, drawn from the fields of computer science, military strategy, international law, political science and military ethics, provides a critical overview of cyber warfare for those approaching the topic from whatever angle. Chapters consider the emergence of the phenomena of cyber warfare in international affairs; what cyber-attacks are from a technological standpoint; the extent to which cyber-attacks can be attributed to state actors; the strategic value and danger posed by cyber conflict; the legal regulation of cyber-attacks, both as international uses of force and as part of an on-going armed conflict, and the ethical implications of cyber warfare. This book will be of great interest to students of cyber warfare, cyber security, military ethics, international law, security studies and IR in general.

This book presents 12 essays that focus on the analysis of the problems prompted by cyber operations (COs). It clarifies and discusses the ethical and regulatory problems raised by the deployment of cyber capabilities by a state's army to inflict disruption or damage to an adversary's targets in or through cyberspace. Written by world-leading philosophers, ethicists, policy-makers, and law and military experts, the essays cover such topics as the conceptual novelty of COs and the ethical problems that this engenders; the applicability of existing conceptual and regulatory frameworks to COs deployed in case of conflicts; the definition of deterrence strategies involving COs; and the analysis of models to foster cooperation in managing cyber crises. Each essay is an invited contribution or a revised version of a paper originally presented at the workshop on Ethics and Policies for Cyber Warfare, organized by the NATO Cooperative Cyber Defence Centre of Excellence in collaboration with the University of Oxford. The volume endorses a multi-disciplinary approach, as such it offers a comprehensive overview of the ethical, legal, and policy problems posed by COs and of the different approaches and methods that can be used to solve them. It will appeal to a wide readership, including ethicists, philosophers, military experts, strategy planners, and law- and policy-makers.

This timely Research Handbook contains an analysis of various legal questions concerning cyberspace and cyber activities and provides a critical account of their effectiveness. Expert contributors examine the application of fundamental international la

Explaining cybercrime in a highly networked world, this book provides a comprehensive yet accessible summary of the history, modern developments, and efforts to combat cybercrime in various forms at all levels of government—international, national, state, and local. • Provides accessible, comprehensive coverage of a complex topic that encompasses identity theft to copyright infringement written for non-technical readers • Pays due attention to important elements of cybercrime that have been largely ignored in the field, especially politics • Supplies examinations of both the domestic and international efforts to combat cybercrime • Serves an ideal text for first-year undergraduate students in criminal justice programs

Network and System Security provides focused coverage of network and system security technologies. It explores practical solutions to a wide range of network and systems security issues. Chapters are authored by leading experts in the field and address the immediate and long-term challenges in the authors' respective areas of expertise. Coverage includes building a secure organization, cryptography, system intrusion, UNIX and Linux security, Internet security, intranet security, LAN security; wireless network security, cellular network security, RFID security, and more. Chapters contributed by leaders in the field covering foundational and practical aspects of system and network security, providing a new level of technical expertise not found elsewhere Comprehensive and updated coverage of the subject area allows the reader to put current technologies to work Presents methods of analysis and problem solving techniques, enhancing the reader's grasp of the material and ability to implement practical solutions

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

Ongoing advancements in modern technology have led to significant developments in artificial intelligence. With the numerous applications available, it becomes imperative to conduct research and make further progress in this field. Artificial Intelligence: Concepts, Methodologies, Tools, and Applications provides a comprehensive overview of the latest breakthroughs and recent progress in artificial intelligence. Highlighting relevant technologies, uses, and techniques across various industries and settings, this publication is a pivotal reference source for researchers, professionals, academics, upper-level students, and practitioners interested in emerging perspectives in the field of artificial intelligence.

THIS BOOK INCLUDES 3 MANUSCRIPTS: BOOK 1 - HOW TO PREVENT PHISHING & SOCIAL ENGINEERING ATTACKSBOOK 2 - INCIDENT MANAGEMENT BEST PRACTICESBOOK 3 - CYBERSECURITY AWARENESS FOR EMPLOYEESBUY THIS BOOK NOW AND GET STARTED TODAY!In this book you will learn over 200 terms and concepts related to Cybersecurity. This book is designed for beginners or employees to have a better understanding and awareness of Threats and Vulnerabilities. This book will teach you how to protect yourself and your Business from the most common Cyber-attacks in no time!In Book 1 You will learn: -The Ultimate Goal of Cybersecurity-Understanding the CIA Triad & Defense in Depth-Understanding Threats, Exploits and Risks-Understanding Malware-Malware & General Countermeasures-How to Report Malware-Attacks on Portable Devices-Intercepted Communication & Countermeasures-Introduction to Social Networking-Social Networking Threats from Cybercriminals-Understanding Cross-site Request Forgery-Social Engineering Countermeasures-Understanding Metadata-Comprehending Outside and Inside Threats to Businesses-Introduction to Phishing-Phishing, Social Engineering & Vishing-How to Prevent Phishing Attacks-How to Report a Phishing Attack-Phishing Countermeasures-How to Report Phishing Attacks-Tips to Avoid Phishing ScamsIn Book 2 You will learn: -How to define Incidents-Basic concepts of Incident Management-How to Define and Classify Incidents-How to prepare Policy and Plans for Incident Management-How to define Incident Responses-Understanding BIA, BCP, DRP, and IR Plans-Disaster Recovery Plan Basics-How to integrate BCP, IR and DRP Plans-How to create an Incident Response Team-IR Team Roles and Responsibilities-What Skillset the Response Team must have-How to train the IR Team-Must have IR Team Tools and Equipment-How to create an Incident Response Team-How to communicate with IR Stakeholders-How to share information with IR Stakeholders-How to use different IR Communication Channels-How to Communicate Incident Responses-How to monitor Incident Response Performance-How to Escalate an incident-How to Collect Data-How to Contain Incidents-How to start Investigating an Incident-Must have Skills for Investigators-Cybersecurity Incident Response Basics-Legal and Regulatory Considerations-How to Collect Evidence-Incident Analysis Basics-Reporting the Investigation-Forensics analysis basics and Test Metrics-How to test an IR Plan-How to Schedule an IR Test-How to Execute an IR Test-How to Conclude the Root Cause-How to upgrade our Controls-How to Evaluate the Response-What is FISMA, NIST, HIPAA, PCI-DSS and more...In Book 3 You will learn: -Viruses, Cryptomalware and Ransomware, Trojans, Rootkits, Keyloggers, Adware, Spyware, -Botnets, Logic Bomb, Backdoors, Social Engineering, Social Engineering Attacks, -Vishing, Tailgaiting, Impersonation, Dumpster Diving, Shoulder Surfing, Hoaxes, -Watering Hole Attack, DDoS Attack, Replay Attacks, Man in the Middle Attack, -Buffer Overflow Attack, SQL Injection Attack, LDAP Injection Attack, -XML Injection Attack, Cross-Site Scripting, Cross-Site Request Forgery, -Privilege Escalation, ARP Poisoning, Smurf Attack, DNS Poisoning, -Zero Day Attacks, Pass the Hash, Clickjacking, Session Hijacking,

-Typo Squatting and URL Hijacking, Shimming, Refactoring, IP/MAC Spoofing, -Wireless Replay Attacks, IV Attack, Rogue Access Points, Evil Twin, WPS Attacks-Bluejacking and Bluesnarfing, NFC Attacks, Dissociation Attack, Brute Force Attack, -Dictionary Attacks, Birthday Attack, Rainbow Tables, Collision and Downgrade Attack, -Open Source Intelligence (OSINT), Penetration Test Steps, Active and Passive Reconnaissance and more...BUY THIS BOOK NOW AND GET STARTED TODAY!

INTELLIGENT SECURITY SYSTEMS Dramatically improve your cybersecurity using AI and machine learning In Intelligent Security Systems, distinguished professor and computer scientist Dr. Leon Reznik delivers an expert synthesis of artificial intelligence, machine learning and data science techniques, applied to computer security to assist readers in hardening their computer systems against threats. Emphasizing practical and actionable strategies that can be immediately implemented by industry professionals and computer device’s owners, the author explains how to install and harden firewalls, intrusion detection systems, attack recognition tools, and malware protection systems. He also explains how to recognize and counter common hacking activities. This book bridges the gap between cybersecurity education and new data science programs, discussing how cutting-edge artificial intelligence and machine learning techniques can work for and against cybersecurity efforts. Intelligent Security Systems includes supplementary resources on an author-hosted website, such as classroom presentation slides, sample review, test and exam questions, and practice exercises to make the material contained practical and useful. The book also offers: A thorough introduction to computer security, artificial intelligence, and machine learning, including basic definitions and concepts like threats, vulnerabilities, risks, attacks, protection, and tools An exploration of firewall design and implementation, including firewall types and models, typical designs and configurations, and their limitations and problems Discussions of intrusion detection systems (IDS), including architecture topologies, components, and operational ranges, classification approaches, and machine learning techniques in IDS design A treatment of malware and vulnerabilities detection and protection, including malware classes, history, and development trends Perfect for undergraduate and graduate students in computer security, computer science and engineering, Intelligent Security Systems will also earn a place in the libraries of students and educators in information technology and data science, as well as professionals working in those fields.

The World Economic Forum regards the threat of cyber attack as one of the top five global risks confronting nations of the world today. Cyber attacks are increasingly targeting the core functions of the economies in nations throughout the world. The threat to attack critical infrastructures, disrupt critical services, and induce a wide range of dam

Know how to mitigate and handle ransomware attacks via the essential cybersecurity training in this book so you can stop attacks before they happen. Learn the types of ransomware, distribution methods, internal structure, families (variants), defense strategies, recovery methods, and legal issues related to reporting ransomware incidents to authorities and other affected parties. This book also teaches you how to develop a ransomware incident response plan to minimize ransomware damage and recover normal operations quickly. Ransomware is a category of malware that can encrypt your computer and mobile device files until you pay a ransom to unlock them. Ransomware attacks are considered the most prevalent cybersecurity threats today—the number of new ransomware variants has grown 30-fold since 2015 and they currently account for roughly 40% of all spam messages. Attacks have increased in occurrence from one every 40 seconds to one every 14 seconds. Government and private corporations are targets. Despite the security controls set by organizations to protect their digital assets, ransomware is still dominating the world of security and will continue to do so in the future. Ransomware Revealed discusses the steps to follow if a ransomware infection occurs, such as how to pay the ransom through anonymous payment methods, perform a backup and restore your affected files, and search online to find a decryption tool to unlock (decrypt) your files for free. Mitigation steps are discussed in depth for both endpoint devices and network systems. What You Will Learn Be aware of how ransomware infects your system Comprehend ransomware components in simple terms Recognize the different types of ransomware families Identify the attack vectors employed by ransomware to infect computer systems Know how to prevent ransomware attacks from successfully comprising your system and network (i.e., mitigation strategies) Know what to do if a successful ransomware infection takes place Understand how to pay the ransom as well as the pros and cons of paying Set up a ransomware response plan to recover from such attacks Who This Book Is For Those who do not specialize in the cybersecurity field (but have adequate IT skills) and want to fully understand the anatomy of ransomware threats. Although most of the book's content will be understood by ordinary computer users, it will also prove useful for experienced IT users aiming to understand the ins and outs of ransomware threats without diving deep into the technical jargon of the internal structure of ransomware.

In 2013 schokte de 29-jarige Edward Snowden de wereld toen hij brak met de Amerikaanse geheime diensten en onthulde dat ze in het allergrootste geheim bezig waren al ons digitale verkeer - elk telefoontje, elk bericht, elke e-mail - te verzamelen en vast te leggen. Van iedereen die zich online begeeft, wordt zo een permanent en onuitwisbaar dossier bijgehouden. Edward Snowden vertelt in dit uiterst meeslepende boek voor het eerst zijn volledige verhaal. Hij laat zien hoe een intelligente jongen uit een idyllische buitenwijk, die opgroeide aan het begin van het internettijdperk en daar al snel de opwindende vrijheid van ontdekte, later een digitale spion werd die mee zou bouwen aan het grootste surveillance-netwerk ooit. Snowden vertelt indringend hoe hij in gewetensnood kwam en uiteindelijk alles op het spel zette om dit systeem aan de kaak te stellen. In ballingschap groeide hij uit tot het geweten van ons online bestaan. Onuitwisbaar is even scherpzinnig en elegant als overtuigend, even indrukwekkend als ontluisterend. Edward Snowden werd geboren in Elizabeth City, North Carolina, en groeide op in de buurt van de militaire basis Fort Meade in Maryland. Na zijn opleiding als systeemengineer kreeg hij een hoge functie binnen de CIA en werkte hij wereldwijd aan diverse projecten voor de NSA. Tegenwoordig is Snowden voorzitter van de raad van bestuur van de Freedom of the Press Foundation. Hij ontving verschillende prijzen voor zijn verdiensten, waaronder de Right Livelihood Award, de Duitse Whistleblower Prize, de Ridenhour Truth-Telling Prize en de Carl von Ossietzky-medaille van de International League of Human Rights.

This book presents the outcomes of the special sessions of the 16th International Conference on Distributed Computing and Artificial Intelligence 2019, a forum that brought together ideas, projects and lessons associated with distributed computing and artificial intelligence, and their applications in various areas. Artificial intelligence is currently transforming our society. Its application in distributed environments, such as the internet, electronic commerce, environmental monitoring, mobile communications, wireless devices, and distributed computing, to name but a few, is continuously increasing, making it an element of high added value and tremendous potential. These technologies are changing constantly as a result of the extensive research and technical efforts being pursued at universities and businesses alike. The exchange of ideas between scientists and technicians from both the academic and industrial sectors is essential to facilitating the development of systems that can meet the ever-growing demands of today’s society. This year’s technical program was characterized by high quality and diversity, with contributions in both well-established and evolving areas of research. More than 120 papers were submitted to the main and special sessions tracks from over 20 different countries (Algeria, Angola, Austria, Brazil, Colombia, France, Germany, India, Italy, Japan, the Netherlands, Oman, Poland, Portugal, South Korea, Spain, Thailand, Tunisia, the United Kingdom and United States), representing a truly “wide area network” of research activity. The symposium was jointly organized by the Osaka Institute of Technology and the University of Salamanca. This year’s event was held in Avila, Spain, from 26th to 28th June, 2019. The authors wish to thank the sponsors: the IEEE Systems Man and Cybernetics Society, Spain Section Chapter and the IEEE Spain Section (Technical Co-Sponsor), IBM, Indra, Viewnext, Global Exchange, AEPIA, APPIA and AIR institute.

While forensic analysis has proven to be a valuable investigative tool in the field of computer security, utilizing anti-forensic technology makes it possible to maintain a covert operational foothold for extended periods, even in a high-security environment. Adopting an approach that favors full disclosure, the updated Second Edition of The Rootkit Arsenal presents the most accessible, timely, and complete coverage of forensic countermeasures. This book covers more topics, in greater depth, than any other currently available. In doing so the author forges through the murky back alleys of the Internet, shedding light on material that has traditionally been poorly documented, partially documented, or intentionally undocumented. The range of topics presented includes how to: -Evade post-mortem analysis -Frustrate attempts to reverse engineer your command & control modules -Defeat live incident response -Undermine the process of memory analysis -Modify subsystem internals to feed misinformation to the outside -Entrench your code in fortified regions of execution -Design and implement covert channels -Unearth new avenues of attack