Sqrrl Threat Hunting

Intelligence-Led Security: How to Understand, Justify and Implement a New Approach to Security is a concise review of the concept of Intelligence-Led Security. Protecting a business, including its information and intellectual property, physical infrastructure, employees, and reputation, has become increasingly difficult. Online threats come from all sides: internal leaks and external adversaries; domestic hacktivists and overseas cybercrime syndicates; targeted threats and mass attacks. And these threats run the gamut from targeted to indiscriminate to entirely accidental. Among thought leaders and advanced organizations, the consensus is now clear. Defensive security measures: antivirus software, firewalls, and other technical controls and post-attack mitigation strategies are no longer sufficient. To adequately protect company assets and ensure business continuity, organizations must be more proactive. Increasingly, this proactive stance is being summarized by the phrase Intelligence-Led Security: the use of data to gain insight into what can happen, who is likely to be involved, how they are likely to attack and, if possible, to predict when attacks are likely to come. In this book, the authors review the current threat-scape and why it requires this new approach, offer a clarifying definition of what Cyber Threat Intelligence is, describe how to communicate its value to business, and lay out concrete steps toward implementing Intelligence-Led Security. Learn how to create a proactive strategy for digital security Use data analysis and threat forecasting to predict and prevent attacks before they start Understand the fundamentals of today's threatscape and how best to organize your defenses

Big data is presenting challenges to cybersecurity. For an example, the Internet of Things (IoT) will reportedly soon generate a staggering 400 zettabytes (ZB) of data a year. Self-driving cars are predicted to churn out 4000 GB of data per hour of driving. Big data analytics, as an emerging analytical technology, offers the capability to collect, store, process, and visualize these vast amounts of data. Big Data Analytics in Cybersecurity examines security challenges surrounding big data and provides actionable insights that can be used to improve the current practices of network operators and administrators. Applying big data analytics in cybersecurity is critical. By exploiting data from the networks and computers, analysts can discover useful network information from data. Decision makers can make more informative decisions by using this analysis, including what actions need to be performed, and improvement recommendations to policies, guidelines, procedures, tools, and other aspects of the network processes. Bringing together experts from academia, government laboratories, and industry, the book provides insight to both new and more experienced security professionals, as well as data analytics professionals who have varying levels of cybersecurity expertise. It covers a wide range of topics in cybersecurity, which include: Network forensics Threat analysis Vulnerability assessment Visualization Cyber training. In addition, emerging security domains such as the IoT, cloud computing, fog computing, mobile computing, and cyber-social networks are examined. The book first focuses on how big data analytics can be used in different aspects of cybersecurity including network forensics, root-cause analysis, and security training. Next it discusses big data challenges and solutions in such emerging cybersecurity domains as fog computing, IoT, and mobile app security. The book concludes by presenting the tools and datasets for future cybersecurity research.

This book provides readers with up-to-date research of emerging cyber threats and defensive mechanisms, which are timely and essential. It covers cyber threat intelligence concepts against a range of threat actors and threat tools (i.e. ransomware) in cutting-edge technologies, i.e., Internet of Things (IoT), Cloud computing and mobile devices. This book also provides the technical information on cyber-threat detection methods required for the researcher and digital forensics experts, in order to build intelligent automated systems to fight against advanced cybercrimes. The ever increasing number of cyber-attacks requires the cyber security and forensic specialists to detect, analyze and defend against the cyber threats in almost real-time, and with such a large number of attacks is not possible without deeply perusing the attack features and taking corresponding intelligent defensive actions this in essence defines cyber threat intelligence notion. However, such intelligence would not be possible without the aid of artificial intelligence, machine learning and advanced data mining techniques to collect, analyze, and interpret cyber-attack campaigns which is covered in this book. This book will focus on cutting-edge research from both academia and industry, with a particular emphasis on providing wider knowledge of the field, novelty of approaches, combination of tools and so forth to perceive reason, learn and act on a wide range of data collected from different cyber security and forensics solutions. This book introduces the notion of cyber threat intelligence and analytics and presents different attempts in utilizing machine learning and data mining techniques to create threat feeds for a range of consumers. Moreover, this book sheds light on existing and emerging trends in the field which could pave the way for future works. The inter-disciplinary nature of this book, makes it suitable for a wide range of audiences with backgrounds in artificial intelligence, cyber security, forensics, big data and data mining, distributed systems and computer networks. This would include industry professionals, advanced-level students and researchers that work within these related fields.

This book provides a step-by-step process that focuses on how to develop, practice, and maintain emergency plans that reflect what must be done before, during, and after a disaster, in order to protect people and property. The communities who preplan and mitigate prior to any incident will be better prepared for emergency scenarios. This book will assist those with the tools to address all phases of emergency management. It covers everything from the social and environmental processes that generate hazards, to vulnerability analysis, hazard mitigation, emergency response, and disaster recovery.

Fictioning

Advances in Human Factors in Cybersecurity

A Guide to Detecting and Responding to Healthcare Breaches and Events

Concepts, Methodologies, Tools, and Applications

How to Define and Build an Effective Cyber Threat Intelligence Capability

Left of Boom

Handbook of Emergency Management Concepts

Network security is not simply about building impenetrable walls—determined attackers will eventually overcome traditional defenses. The most effective computer security strategies integrate network security monitoring (NSM): the collection and analysis of data to help you detect and respond to intrusions. In The Practice of Network Security Monitoring, Mandiant CSO Richard Bejtlich shows you how to use NSM to add a robust layer of protection around your networks—no prior experience required. To help you avoid costly and inflexible solutions, he teaches you how to deploy, build, and run an NSM operation using open source software and vendor-neutral tools. You'll learn how to: –Determine where to deploy NSM platforms, and size them for the monitored networks –Deploy stand-alone or distributed NSM installations –Use command line and graphical packet analysis tools, and NSM consoles –Interpret network evidence from server-side and client-side intrusions –Integrate threat intelligence into NSM software to identify sophisticated adversaries There's no foolproof way to keep attackers out of your network. But when they get in, you'll be prepared. The Practice of Network Security Monitoring will show you how to build a security net to detect, contain, and control them. Attacks are inevitable, but losing sensitive data shouldn't be.

These proceedings represent the work of researchers participating in the 13th International Conference on Cyber Warfare and Security (ICCWS 2018) which is being hosted this year by the National Defense University in Washington DC, USA on 8-9 March 2018.

In this extensively illustrated book containing over 80 diagrams and images of artworks, David Burrows and Simon O'Sullivan explore the process of fictioning in contemporary art through three focal points: performance fictioning, science fictioning and machine fictioning.

Develop a comprehensive plan for building a HIPAA-compliant security operations center, designed to detect and respond to an increasing number of healthcare data breaches and events. Using risk analysis, assessment, and management data combined with knowledge of cybersecurity program maturity, this book gives you the tools you need to operationalize threat intelligence, vulnerability management, security monitoring, and incident response processes to effectively meet the challenges presented by healthcare's current threats. Healthcare entities are bombarded with data. Threat intelligence feeds, news updates, and messages come rapidly and in many forms such as email, podcasts, and more. New vulnerabilities are found every day in applications, operating systems, and databases while older vulnerabilities remain exploitable. Add in the number of dashboards, alerts, and data points each information security tool provides and security teams find themselves swimming in oceans of data and unsure where to focus their energy. There is an urgent need to have a cohesive plan in place to cut through the noise and face these threats. Cybersecurity operations do not require expensive tools or large capital investments. There are ways to capture the necessary data. Teams protecting data and supporting HIPAA compliance can do this. All that's required is a plan—which author Eric Thompson provides in this book. What You Will Learn Know what threat intelligence is and how you can make it useful Understand how effective vulnerability management extends beyond the risk scores provided by vendors Develop continuous monitoring on a budget Ensure that incident response is appropriate Help healthcare organizations comply with HIPAA Who This Book Is For Cybersecurity, privacy, and compliance professionals working for organizations responsible for creating, maintaining, storing, and protecting patient information.

From Database to Cyber Security

Collection, Detection, and Analysis

Cyber Defense Bulletin Third Edition

Managed Code Rootkits

A Step-by-Step Approach

Globalisation and the Postcolonial World

Threat Mitigation and Detection of Cyber Warfare and Terrorism Activities

This book constitutes revised and selected papers from the scientific satellite events held in conjunction with the18th International Conference on Service-Oriented Computing, ICSOC 2020. The conference was held virtually during December 14-17, 2020. A total of 125 submissions were received for the satellite events. The volume includes 9 papers from the PhD Symposium Track, 4 papers from the Demonstration Track, and 45 papers from the following workshops: International Workshop on Artificial Intelligence for IT Operations (AIOps) International Workshop on Cyber Forensics and Threat Investigations Challenges in Emerging Infrastructures (CFTIC 2020) 2nd Workshop on Smart Data Integration and Processing (STRAPS 2020) International Workshop on AI-enabled Process Automation (AI-PA 2020) International Workshop on Artificial Intelligence in the IoT Security Services (AI-IOTS 2020)

Practical Threat Intelligence and Data-Driven Threat HuntingA hands-on guide to threat hunting with the ATT&CK™ Framework and open source toolsPackt Publishing Ltd

The explosive New York Times bestseller! On September 11, 2001, Doug Laux was a freshman in college, on the path to becoming a doctor. But with the fall of the Twin Towers came a turning point in his life. After graduating he joined the Central Intelligence Agency, determined to get himself to Afghanistan and into the center of the action. Through persistence and hard work he was fast-tracked to a clandestine operations position overseas. Dropped into a remote region of Afghanistan, he received his baptism by fire. Frustrated by bureaucratic red tape, a widespread lack of knowledge of the local customs and culture and an attitude of complacency that hindered his ability to combat the local Taliban, Doug confounded his peers by dressing like a native and mastering the local dialect, making contact and building sources within several deadly terrorist networks. His new approach resulted in unprecedented successes, including uncovering the largest IED network in the world, responsible for killing hundreds of US soldiers. Meanwhile, Doug had to keep up false pretenses with his family, girlfriend and friends--nobody could know what he did for a living--and deal with the emotional turbulence of constantly living a lie. His double life was building to an explosive resolution, with repercussions that would have far reaching consequences.

This book presents refereed proceedings of the First International Conference on Advances in Cyber Security, ACeS 2019, held in Penang, Malaysia, in July-August 2019. The 25 full papers and 1 short paper were carefully reviewed and selected from 87 submissions. The papers are organized in topical sections on internet of things, industry and blockchain, and cryptology; digital forensics and surveillance, botnet and malware, and DDoS and intrusion detection/prevention; ambient cloud and edge computing, wireless and cellular communication.

Proceedings of the AHFE 2017 International Conference on Human Factors in Cybersecurity, July 17−21, 2017, The Westin Bonaventure Hotel, Los Angeles, California, USA

Applied Network Security Monitoring

Building Effective Cybersecurity Programs

Hooking into Runtime Environments

Cyber Threat Intelligence

The Effective CISSP: Security and Risk Management

AIOps, CFTIC, STRAPS, AI-PA, AI-IOTS, and Satellite Events, Dubai, United Arab Emirates, December 14–17, 2020, Proceedings

Build your organization's cyber defense system by effectively implementing digital forensics and incident management techniques Key Features Create a solid incident response framework and manage cyber incidents effectively Perform malware analysis for effective incident response Explore real-life scenarios that effectively use threat intelligence and modeling techniques Book Description An understanding of how digital forensics integrates with the overall response to cybersecurity incidents is key to securing your organization's infrastructure from attacks. This updated second edition will help you perform cutting-edge digital forensic activities and incident response. After focusing on the fundamentals of incident response that are critical to any information security team, you'll move on to exploring the incident response framework. From understanding its importance to creating a swift and effective response to security incidents, the book will guide you with the help of useful examples. You'll later get up to speed with digital forensic techniques, from acquiring evidence and examining volatile memory through to hard drive examination and network-based evidence. As you progress, you'll discover the role that threat intelligence plays in the incident response process. You'll also learn how to prepare an incident response report that documents the findings of your analysis. Finally, in addition to various incident response activities, the book will address malware analysis, and demonstrate how you can proactively use your digital forensic skills in threat hunting. By the end of this book, you'll have learned how to efficiently investigate and report unwanted security breaches and incidents in your organization. What you will learn Create and deploy an incident response capability within your own organization Perform proper evidence acquisition and handling Analyze the evidence collected and determine the root cause of a security incident Become well-versed with memory and log analysis Integrate digital forensic techniques and procedures into the overall incident response process Understand the different techniques for threat hunting Write effective incident reports that document the key findings of your analysis Who this book is for This book is for cybersecurity and information security professionals who want to implement digital forensics and incident response in their organization. You will also find the book helpful if you are new to the concept of digital forensics and are looking to get started with the fundamentals. A basic understanding of operating systems and some knowledge of networking fundamentals are required to get started with this book.

This Festschrift is in honor of Sushil Jajodia, Professor in the George Mason University, USA, on the occasion of his 70th birthday. This book contains papers written in honor of Sushil Jajodia, of his vision and his achievements. Sushil has sustained a highly active research agenda spanning several important areas in computer security and privacy, and established himself as a leader in the security research community through unique scholarship and service. He has extraordinarily impacted the scientific and academic community, opening and pioneering new directions of research, and significantly influencing the research and development of security solutions worldwide. Also, his excellent record of research funding shows his commitment to sponsored research and the practical impact of his work. The research areas presented in this Festschrift include membrane computing, spiking neural networks, phylogenetic networks, ant colonies optimization, work bench for bio-computing, reaction systems, entropy of computation, rewriting systems, and insertion-deletion systems.

Managed Code Rootkits is the first book to cover application-level rootkits and other types of malware inside the application VM, which runs a platform-independent programming environment for processes. The book, divided into four parts, points out high-level attacks, which are developed in intermediate language. The initial part of the book offers an overview of managed code rootkits. It explores environment models of managed code and the relationship of managed code to rootkits by studying how they use application VMs. It also discusses attackers of managed code rootkits and various attack scenarios. The second part of the book covers the development of managed code rootkits, starting with the tools used in producing managed code rootkits through their deployment. The next part focuses on countermeasures that can possibly be used against managed code rootkits, including technical solutions, prevention, detection, and response tactics. The book concludes by presenting techniques that are somehow similar to managed code rootkits, which can be used in solving problems. Named a 2011 Best Hacking and Pen Testing Book by InfoSec Reviews Introduces the reader briefly to managed code environments and rootkits in general Completely details a new type of rootkit hiding in the application level and demonstrates how a hacker can change language runtime implementation Focuses on managed code including Java, .NET, Android Dalvik and reviews malware development scenarios

Start with a Solid Foundation to Secure Your CISSP! The Effective CISSP: Security and Risk Management is for CISSP aspirants and those who are interested in information security or confused by cybersecurity buzzwords and jargon. It is a supplement, not a replacement, to the CISSP study guides that CISSP aspirants have used as their primary source. It introduces core concepts, not all topics, of Domain One in the CISSP CBK - Security and Risk Management. It helps CISSP aspirants build a conceptual security model or blueprint so that they can proceed to read other materials, learn confidently and with less frustration, and pass the CISSP exam accordingly. Moreover, this book is also beneficial for ISSMP, CISM, and other cybersecurity certifications. This book proposes an integral conceptual security model by integrating ISO 31000, NIST FARM Risk Framework, and PMI Organizational Project Management (OPM) Framework to provide a holistic view for CISSP aspirants. It introduces two overarching models as the guidance for the first CISSP Domain: Wentz's Risk and Governance Model. Wentz's Risk Model is based on the concept of neutral risk and integrates the Peacock Model, the Onion Model, and the Protection Ring Model derived from the NIST Generic Risk Model. Wentz's Governance Model is derived from the integral discipline of governance, risk management, and compliance. There are six chapters in this book organized structurally and sequenced logically. If you are new to CISSP, read them in sequence; if you are eager to learn anything and have a bird view from one thousand feet high, the author highly suggests keeping an eye on Chapter 2 Security and Risk Management. This book, as both a tutorial and reference, deserves space on your bookshelf.

The Hunter's Handbook

Основы кибербезопасности. Стандарты, концепции, методы и средства обеспечения

A Beginner's Guide

Cybersecurity for the Modern Ninja

Endgame's Guide to Adversary Hunting

Designing a HIPAA-Compliant Security Operations Center

This book reports on the latest research and developments in the field of cybersecurity, placing special emphasis on personal security and new methods for reducing human error and increasing cyber awareness, as well as innovative solutions for increasing the security of advanced Information Technology (IT) infrastructures. It covers a broad range of topics, including methods for human training; novel Cyber-Physical and Process-Control Systems; social, economic, and behavioral aspects of cyberspace; issues concerning the cybersecurity index; security metrics for enterprises; risk evaluation, and many others. Based on the AHFE 2017 International Conference on Human Factors in Cybersecurity, held on July 17–21, 2017, in Los Angeles, California, USA, the book not only presents innovative cybersecurity technologies, but also discusses emerging threats, current gaps in the available systems, and future challenges that may be successfully overcome with the help of human factors research.

Majalah elektronik dari Cyber Defense Community Indonesia (CDEF.ID) berisi berbagai informasi terbaru seputar cyber defense, tutorial, wawancara tokoh, laporan kegiatan, dan lain-lain

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

This book on computer security threats explores the computer security threats and includes a broad set of solutions to defend the computer systems from these threats. The book is triggered by the understanding that digitalization and growing dependence on the Internet poses an increased risk of computer security threats in the modern world. The chapters discuss different research frontiers in computer security with algorithms and implementation details for use in the real world. Researchers and practitioners in areas such as statistics, pattern recognition, machine learning, artificial intelligence, deep learning, data mining, data analytics and visualization are contributing to the field of computer security. The intended audience of this book will mainly consist of researchers, research students, practitioners, data analysts, and business professionals who seek information on computer security threats and its defensive measures.

Cyberjutsu

Building an Effective Cybersecurity Program, 2nd Edition

First International Conference, ACeS 2019, Penang, Malaysia, July 30 – August 1, 2019, Revised Selected Papers

21st European Conference on Cyber Warfare and Security
Applied Security Visualization
Network Security Through Data Analysis
Computer and Information Security Handbook

Leverage cyber threat intelligence and the MITRE framework to enhance your prevention mechanisms, detection capabilities, and learn top adversarial simulation and emulation techniques Key Features • Apply real-world strategies to strengthen the capabilities of your organization's security system • Learn to not only defend your system but also think from an attacker's perspective • Ensure the ultimate effectiveness of an organization's red and blue teams with practical tips Book Description With small to large companies focusing on hardening their security systems, the term "purple team" has gained a lot of traction over the last couple of years. Purple teams represent a group of individuals responsible for securing an organization's environment using both red team and blue team testing and integration – if you're ready to join or advance their ranks, then this book is for you. Purple Team Strategies will get you up and running with the exact strategies and techniques used by purple teamers to implement and then maintain a robust environment. You'll start with planning and prioritizing adversary emulation, and explore concepts around building a purple team infrastructure as well as simulating and defending against the most trendy ATT&CK tactics. You'll also dive into performing assessments and continuous testing with breach and attack simulations. Once you've covered the fundamentals, you'll also learn tips and tricks to improve the overall maturity of your purple teaming capabilities along with measuring success with KPIs and reporting. With the help of real-world use cases and examples, by the end of this book, you'll be able to integrate the best of both sides: red team tactics and blue team security measures. What you will learn • Learn and implement the generic purple teaming process • Use cloud environments for assessment and automation • Integrate cyber threat intelligence as a process • Configure traps inside the network to detect attackers • Improve red and blue team collaboration with existing and new tools • Perform assessments of your existing security controls Who this book is for If you're a cybersecurity analyst, SOC engineer, security leader or strategist, or simply interested in learning about cyber attack and defense strategies, then this book is for you. Purple team members and chief information security officers (CISOs) looking at securing their organizations from adversaries will also benefit from this book. You'll need some basic knowledge of Windows and Linux operating systems along with a fair understanding of networking concepts before you can jump in, while ethical hacking and penetration testing know-how will help you get the most out of this book.

Go beyond TaoSecurity Blog with this new volume from author Richard Bejtlich.In the first three volumes of the series, Mr. Bejtlich selected and republished the very best entries from 18 years of writing and over 18 million blog views, along with commentaries and additional material. In this title, Mr. Bejtlich collects material that has not been published elsewhere, including articles that are no longer available or are stored in assorted digital or physical archives.Volume 4 offers early white papers that Mr. Bejtlich wrote as a network defender, either for technical or policy audiences. It features posts from other blogs or news outlets, as well as some of his written testimony from eleven Congressional hearings. For the first time, Mr. Bejtlich publishes documents that he wrote as part of his abandoned war studies PhD program. This last batch of content was only available to his advisor, Dr. Thomas Rid, and his review committee at King's College London.Read how the security industry, defensive methodologies, and strategies to improve national security have evolved in this new book, written by one of the authors who has seen it all and survived to blog about it.

Get to grips with cyber threat intelligence and data-driven threat hunting while exploring expert tips and techniques Key FeaturesSet up an environment to centralize all data in an Elasticsearch, Logstash, and Kibana (ELK) server that enables threat huntingCarry out atomic hunts to start the threat hunting process and understand the environmentPerform advanced hunting using MITRE ATT&CK Evals emulations and Mordor datasetsBook Description Threat hunting (TH) provides cybersecurity analysts and enterprises with the opportunity to proactively defend themselves by getting ahead of threats before they can cause major damage to their business. This book is not only an introduction for those who don't know much about the cyber threat intelligence (CTI) and TH world, but also a guide for those with more advanced knowledge of other cybersecurity fields who are looking to implement a TH program from scratch. You will start by exploring what threat intelligence is and how it can be used to detect and prevent cyber threats. As you progress, you'll learn how to collect data, along with understanding it by developing data models. The book will also show you how to set up an environment for TH using open source tools. Later, you will focus on how to plan a hunt with practical examples, before going on to explore the MITRE ATT&CK framework. By the end of this book, you'll have the skills you need to be able to carry out effective hunts in your own environment. What you will learnUnderstand what CTI is, its key concepts, and how it is useful for preventing threats and protecting your organizationExplore the different stages of the TH processModel the data collected and understand how to document the findingsSimulate threat actor activity in a lab environmentUse the information collected to detect breaches and validate the results of your queriesUse documentation and strategies to communicate processes to senior management and the wider businessWho this book is for If you are looking to start out in the cyber intelligence and threat hunting domains and want to know more about how to implement a threat hunting division with open-source tools, then this cyber threat intelligence book is for you.

Like Sun Tzu's Art of War for Modern Business, this book uses ancient ninja scrolls as the foundation for teaching readers about cyber-warfare, espionage and security. Cyberjutsu is a practical cybersecurity field guide based on the techniques, tactics, and procedures of the ancient ninja. Cyber warfare specialist Ben McCarty’s analysis of declassified Japanese scrolls will show how you can apply ninja methods to combat today’s security challenges like information warfare, deceptive infiltration, espionage, and zero-day attacks. Learn how to use key ninja techniques to find gaps in a target’s defense, strike where the enemy is negligent, master the art of invisibility, and more. McCarty outlines specific, in-depth security mitigations such as fending off social engineering attacks by being present with “the correct mind,” mapping your network like an adversary to prevent breaches, and leveraging ninja-like traps to protect your systems. You’ll also learn how to: • Use threat modeling to reveal network vulnerabilities • Identify insider threats in your organization • Deploy countermeasures like network sensors, time-based controls, air gaps, and authentication protocols • Guard against malware command and-control servers • Detect attackers, prevent supply-chain attacks, and counter zero-day exploits Cyberjutsu is the playbook that every modern cybersecurity professional needs to channel their inner ninja. Turn to the old ways to combat the latest cyber threats and stay one step ahead of your adversaries.

Data-Driven Security
ICCWS 2018 13th International Conference on Cyber Warfare and Security
Enhancing global security posture through uniting red and blue teams with adversary emulation
Big Data Analytics in Cybersecurity
Service-Oriented Computing – ICSOC 2020 Workshops
Understanding Incident Detection and Response
The Best of TaoSecurity Blog, Volume 4

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.

Technology provides numerous opportunities for positive developments in modern society; however, these venues inevitably increase vulnerability to threats in online environments. Addressing issues of security in the cyber realm is increasingly relevant and critical to society. Threat Mitigation and Detection of Cyber Warfare and Terrorism Activities is a comprehensive reference source for the latest scholarly perspectives on countermeasures and related methods to enhance security and protection against criminal activities online. Highlighting a range of topics relevant to secure computing, such as parameter tampering, surveillance and control, and digital protests, this book is ideally designed for academics, researchers, graduate students, professionals, and practitioners actively involved in the expanding field of cyber security.

Uncover hidden patterns of data and respond with countermeasures Security professionals need all the tools at their disposal to increase their visibility in order to prevent security breaches and attacks. This careful guide explores two of the most powerful data analysis and visualization. You'll soon understand how to harness and wield data, from collection and storage to management and analysis as well as visualization and presentation. Using a hands-on approach with real-world examples, this book shows you how to gather feedback, measure the effectiveness of your security methods, and make better decisions. Everything in this book will have practical application for information security professionals. Helps IT and security professionals understand and use data, so they can thwart attacks and understand and visualize vulnerabilities in their networks Includes more than a dozen real-world examples and hands-on exercises that demonstrate how to analyze security data and intelligence and translate that information into visualizations that make plain how to prevent attacks Covers topics such as how to acquire and prepare security data, use simple statistical methods to detect malware, predict rogue behavior, correlate security events, and more Written by a team of well-known experts in the field of security and data analysis Lock down your networks, prevent hacks, and thwart malware by improving visibility into the environment, all through the power of data and Security Using Data Analysis, Visualization, and Dashboards.

Traditional intrusion detection and logfile analysis are no longer enough to protect today’s complex networks. In this practical guide, security researcher Michael Collins shows you several techniques and tools for collecting and analyzing network traffic datasets. You’ll understand how your network is used, and what actions are necessary to protect and improve it. Divided into three sections, this book examines the process of collecting and organizing data, various tools for analysis, and several different analytic scenarios and techniques. It’s ideal for network administrators and operational security analysts familiar with scripting. Explore network, host, and service sensors for capturing security data Store data traffic with relational databases, graph databases, Redis, and Hadoop Use SiLK, the R language, and other tools for analysis and visualization Detect unusual phenomena through Exploratory Data Analysis (EDA) Identify significant structures in networks with graph analysis Determine the traffic that’s crossing service ports in a network Examine traffic volume and behavior to spot DDoS and database raids Get a step-by-step process for network mapping and inventory

Computer Security Threats
Building Situational Awareness
Beyond Intrusion Detection
Advances in Cyber Security
The Tao of Network Security Monitoring
The New Political Economy of Development
Incident response techniques and procedures to respond to modern cyber threats

"The book you are about to read will arm you with the knowledge you need to defend your network from attackers—both the obvious and the not so obvious.... If you are new to network security, don't put this book back on the shelf! This is a great book for beginners and I wish I had access to it many years ago. If you've learned the basics of TCP/IP protocols and run an open source or commercial IDS, you may be asking 'What's next?' If so, this book is for you." —Ron Gula, founder and CTO, Tenable Network Security, from the Foreword "Richard Bejtlich has a good perspective on Internet security—one that is orderly and practical at the same time. He keeps readers grounded and addresses the fundamentals in an accessible way." —Marcus Ranum, TruSecure "This book is not about security or network monitoring: It's about both, and in reality these are two aspects of the same problem. You can easily find people who are security experts or network monitors, but this book explains how to master both topics." —Luca Deri, ntop.org "This book will enable security professionals of all skill sets to improve their understanding of what it takes to set up, maintain, and utilize a successful network intrusion detection strategy." —Kirby Kuehl, Cisco Systems Every network can be compromised. There are too many systems, offering too many services, running too many flawed applications. No amount of careful coding, patch management, or access control can keep out every attacker. If prevention eventually fails, how do you prepare for the intrusions that will eventually happen? Network security monitoring (NSM) equips security staff to deal with the inevitable consequences of too few resources and too many responsibilities. NSM collects the data needed to generate better assessment, detection, and response processes—resulting in decreased impact from unauthorized activities. In The Tao of Network Security Monitoring , Richard Bejtlich explores the products, people, and processes that implement the NSM model. By focusing on case studies and the application of open source tools, he helps you gain hands-on knowledge of how to better defend networks and how to mitigate damage from security incidents. Inside, you will find in-depth information on the following areas. The NSM operational framework and deployment considerations. How to use a variety of open-source tools—including Sguil, Argus, and Ethereal—to mine network traffic for full content, session, statistical, and alert data. Best practices for conducting emergency NSM in an incident response scenario, evaluating monitoring vendors, and deploying an NSM architecture. Developing and applying knowledge of weapons, tactics, telecommunications, system administration, scripting, and programming for NSM. The best tools for generating arbitrary packets, exploiting flaws, manipulating traffic, and conducting reconnaissance. Whether you are new to network intrusion detection and incident response, or a computer-security veteran, this book will enable you to quickly develop and apply the skills needed to detect, prevent, and respond to new and emerging threats.

The second edition of this comprehensive handbook of computer and information security provides the most complete view of computer security and privacy available. It offers in-depth coverage of security theory, technology, and practice as they relate to established technologies as well as recent advances. It explores practical solutions to many security issues. Individual chapters are authored by leading experts in the field and address the immediate and long-term challenges in the authors’ respective areas of expertise. The book is organized into 10 parts comprised of 70 contributed chapters by leading experts in the areas of networking and systems security, information management, cyber warfare and security, encryption technology, privacy, data storage, physical security, and a host of advanced security topics. New to this edition are chapters on intrusion detection, securing the cloud, securing web apps, ethical hacking, cyber forensics, physical security, disaster recovery, cyber attack deterrence, and more. Chapters by leaders in the field on theory and practice of computer and information security technology, allowing the reader to develop a new level of technical expertise Comprehensive and up-to-date coverage of security issues 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

BUILD YOUR CYBERSECURITY PROGRAM WITH THIS COMPLETELY UPDATED GUIDE Security practitioners now have a comprehensive blueprint to build their cybersecurity programs. Building an Effective Cybersecurity Program (2nd Edition) instructs security architects, security managers, and security engineers how to properly construct effective cybersecurity programs using contemporary architectures, frameworks, and models. This comprehensive book is the result of the author’s professional experience and involvement in designing and deploying hundreds of cybersecurity programs. The extensive content includes: Recommended design approaches, Program structure, Cybersecurity technologies, Governance Policies, Vulnerability, Threat and intelligence capabilities, Risk management, Defense-in-depth, DevSecOps, Service management, …and much more! The book is presented as a practical roadmap detailing each step required for you to build your effective cybersecurity program. It also provides many design templates to assist in program builds and all chapters include self-study questions to gauge your progress.

With this new 2nd edition of 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. Whether you are a new manager or current manager involved in your organization’s cybersecurity program, this book will answer many questions you have on what is involved in building a program. You will be able to get up to speed quickly on program development practices and have a roadmap to follow in building or improving your organization’s cybersecurity program. If you are new to cybersecurity in the short period of time it will take you to read this book, you can be the smartest person in the room grasping the complexities of your organization’s cybersecurity program. If you are a manager already involved in your organization’s cybersecurity program, you have much to gain from reading this book. This book will become your go to field manual guiding or affirming your program decisions.

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A hands-on guide to threat hunting with the ATT&CK™ Framework and open source tools
Analysis, Visualization and Dashboards
Cyber Defense Bulletin Second Edition
How a Young CIA Case Officer Penetrated the Taliban and Al-Qaeda
Beyond the Blog with Articles, Testimony, and Scholarship
Purple Team Strategies
A Security Manager’s Handbook

This major introductory text analyses key development issues and debates from the colonial period up to the present. It traces the historical development of capitalism through successive phases of expansion leading to the present 'implosion'. The book's core focus is on the emergence of a new political economy characterised by flexible accumulation and globalisation, and its differential impact on rising and declining regions of the post-colonial world.

Cybersecurity is undoubtedly one of the fastest-growing fields. However, there is an acute shortage of skilled workforce. The cybersecurity beginners guide aims at teaching security enthusiasts all about organizational digital assets’ security, give them an overview of how the field operates, applications of cybersecurity across sectors and industries, and skills and certifications one needs to build and scale up a career in this field.

Cyber security has become a topic of concern over the past decade as private industry, public administration, commerce, and communication have gained a greater online presence. As many individual and organizational activities continue to evolve in the digital sphere, new vulnerabilities arise. Cyber Security and Threats: Concepts, Methodologies, Tools, and Applications contains a compendium of the latest academic material on new methodologies and applications in the areas of digital security and threats. Including innovative studies on cloud security, online threat protection, and cryptography, this multi-volume book is an ideal source for IT specialists, administrators, researchers, and students interested in uncovering new ways to thwart cyber breaches and protect sensitive digital information.

Harness new techniques that let you see what is happening on your networks and take decisive action without getting lost in a sea of data.

Digital Forensics and Incident Response
Practical Threat Intelligence and Data-Driven Threat Hunting
The Practice of Network Security Monitoring

Cyber Security and Threats: Concepts, Methodologies, Tools, and Applications
The Myth-Functions of Contemporary Art and Philosophy
An Introduction to Cyber Security
Essays Dedicated to Sushil Jajodia on the Occasion of His 70th Birthday