Hands On Incident Response And Digital Forensics

Eventually, you will enormously discover a supplementary experience and carrying out by spending more cash. nevertheless when? pull off you take that you require to get those every needs as soon as having significantly cash? Why dont you attempt to get something basic in the beginning? Thats something that will guide you to comprehend even more roughly speaking the globe, experience, some places, next history, amusement, and a lot more?

It is your utterly own time to pretend reviewing habit. among guides you could enjoy now is **Hands On Incident Response And Digital Forensics** below.

CSO - 2006-01
The business to business trade publication for information and physical Security professionals.

Blockchain and Clinical Trial - Hamid Jahankhani 2019-04-08
This book aims to highlight the gaps and the transparency issues in the clinical research and trials processes and how there is a lack of information flowing back to researchers and patients involved in those trials. Lack of data transparency is an underlying theme within the clinical research world and causes issues of corruption, fraud, errors and a problem of reproducibility. Blockchain can prove to be a method to ensure a much more joined up and integrated approach to data sharing and improving patient outcomes. Surveys undertaken by creditable organisations in the healthcare industry are

analysed in this book that show strong support for using blockchain technology regarding strengthening data security, interoperability and a range of beneficial use cases where mostly all respondents of the surveys believe blockchain will be important for the future of the healthcare industry. Another aspect considered in the book is the coming surge of healthcare wearables using Internet of Things (IoT) and the prediction that the current capacity of centralised networks will not cope with the demands of data storage. The benefits are great for clinical research, but will add more pressure to the transparency of clinical trials and how this is managed unless a secure mechanism like, blockchain is used.

Digital Forensics - André Årnes 2017-07-24

The definitive text for students of digital forensics, as well as professionals looking to deepen their understanding of an increasingly critical field Written by faculty members and associates of the world-renowned Norwegian Information Security Laboratory (NisLab) at the Norwegian University of Science and Technology (NTNU), this textbook takes a scientific approach to digital forensics ideally suited for university courses in digital forensics and information security. Each chapter was written by an accomplished expert in his or her field, many of them with extensive experience in law enforcement and industry. The author team comprises experts in digital forensics, cybercrime law, information security and related areas. Digital forensics is a key competency in meeting the growing risks of cybercrime, as well as for criminal investigation generally. Considering the astonishing pace at which new information technology – and new ways of exploiting information technology – is brought on line, researchers and practitioners regularly face new technical challenges, forcing them to continuously upgrade their investigatory

skills. Designed to prepare the next generation to rise to those challenges, the material contained in Digital Forensics has been tested and refined by use in both graduate and undergraduate programs and subjected to formal evaluations for more than ten years. Encompasses all aspects of the field, including methodological, scientific, technical and legal matters Based on the latest research, it provides novel insights for students, including an informed look at the future of digital forensics Includes test questions from actual exam sets, multiple choice questions suitable for online use and numerous visuals, illustrations and case example images Features real-word examples and scenarios, including court cases and technical problems, as well as a rich library of academic references and references to online media Digital Forensics is an excellent introductory text for programs in computer science and computer engineering and for master degree programs in military and police education. It is also a valuable reference for legal practitioners, police officers, investigators, and forensic practitioners seeking to gain a deeper understanding of digital forensics and cybercrime.

Cyber Investigations - André Årnes 2023-01-04

CYBER INVESTIGATIONS A classroom tested introduction to cyber investigations with real-life examples included Cyber Investigations provides an introduction to the topic, an overview of the investigation process applied to cyber investigations, a review of legal aspects of cyber investigations, a review of Internet forensics and open-source intelligence, a research-based chapter on anonymization, and a deep-dive in to multimedia forensics. The content is structured in a consistent manner, with an emphasis on accessibility for students of computer science, information security, law enforcement, and military disciplines. To aid in reader comprehension and seamless assimilation of the material, real-life examples and student

exercises are provided throughout, as well as an Educational Guide for both teachers and students. The material has been classroom-tested and is a perfect fit for most learning environments. Written by a highly experienced author team with backgrounds in law enforcement, academic research, and industry, sample topics covered in Cyber Investigations include: The cyber investigation process, including developing an integrated framework for cyber investigations and principles for the integrated cyber investigation process (ICIP) Cyber investigation law, including reasonable grounds to open a criminal cyber investigation and general conditions for privacy-invasive cyber investigation methods Perspectives of internet and cryptocurrency investigations, including examples like the proxy seller, the scammer, and the disgruntled employee Internet of things (IoT) investigations, including types of events leading to IoT investigations and new forensic challenges in the field Multimedia forensics facilitates the understanding of the role of multimedia in investigations, including how to leverage similarity matching, content-based tracing, and media metadata. Anonymization networks discusses how such networks work, and how they impact investigations? It addresses aspects of tracing, monitoring, evidence acquisition, de-anonymization, and large investigations Based on research, teaching material, experiences, and student feedback over several years, Cyber Investigations is ideal for all students and professionals in the cybersecurity industry, providing comprehensive subject coverage from faculty, associates, and former students of cyber security and digital forensics at the Norwegian University of Science and Technology (NTNU).

Digital Forensics, Investigation, and Response + Cloud Labs - Chuck Easttom 2021-08-15

Print Textbook & Cloud Lab Access: 180-day subscription. The cybersecurity Cloud Labs for Digital Forensics, Investigation, and Response provide fully immersive mock IT infrastructures with live virtual machines and real software, where students will learn and practice the foundational information security skills they will need to excel in their future careers. Unlike simulations, these hands-on virtual labs reproduce the complex challenges of the real world, without putting an institution's assets at risk. Available as a standalone lab solution or bundled with Jones & Bartlett Learning textbooks, these cybersecurity Cloud Labs are an essential tool for mastering key course concepts through hands-on training. Labs: Lab 1: Applying the Daubert Standard to Forensic Evidence Lab 2: Recognizing the Use of Steganography in Forensic Evidence Lab 3: Recovering Deleted and Damaged Files Lab 4: Conducting an Incident Response Investigation Lab 5: Conducting Forensic Investigations on Windows Systems Lab 6: Conducting Forensic Investigations on Linux Systems Lab 7: Conducting Forensic Investigations on Email and Chat Logs Lab 8: Conducting Forensic Investigations on Mobile Devices Lab 9: Conducting Forensic Investigations on Network Infrastructure Lab 10: Conducting Forensic Investigations on System Memory Supplemental Lab 1: Conducting Forensic Investigations on Cloud Services Supplemental Lab 2: Conducting Forensic Investigations on Social Media

Digital Forensics and Investigations - Jason Sachowski 2018-05-16

Digital forensics has been a discipline of Information Security for decades now. Its principles, methodologies, and techniques have remained consistent despite the evolution of technology, and, ultimately, it and can be applied to any form of digital data. However, within a corporate

environment, digital forensic professionals are particularly challenged. They must maintain the legal admissibility and forensic viability of digital evidence in support of a broad range of different business functions that include incident response, electronic discovery (ediscovery), and ensuring the controls and accountability of such information across networks. Digital Forensics and Investigations: People, Process, and Technologies to Defend the Enterprise provides the methodologies and strategies necessary for these key business functions to seamlessly integrate digital forensic capabilities to guarantee the admissibility and integrity of digital evidence. In many books, the focus on digital evidence is primarily in the technical, software, and investigative elements, of which there are numerous publications. What tends to get overlooked are the people and process elements within the organization. Taking a step back, the book outlines the importance of integrating and accounting for the people, process, and technology components of digital forensics. In essence, to establish a holistic paradigm—and best-practice procedure and policy approach—to defending the enterprise. This book serves as a roadmap for professionals to successfully integrate an organization's people, process, and technology with other key business functions in an enterprise's digital forensic capabilities.

File System Forensic Analysis - Brian Carrier 2005-03-17

The Definitive Guide to File System Analysis: Key Concepts and Hands-on Techniques Most digital evidence is stored within the computer's file system, but understanding how file systems work is one of the most technically challenging concepts for a digital investigator because there exists little documentation. Now, security expert Brian Carrier has written the definitive reference for everyone who wants to understand and be able to

testify about how file system analysis is performed. Carrier begins with an overview of investigation and computer foundations and then gives an authoritative, comprehensive, and illustrated overview of contemporary volume and file systems: Crucial information for discovering hidden evidence, recovering deleted data, and validating your tools. Along the way, he describes data structures, analyzes example disk images, provides advanced investigation scenarios, and uses today's most valuable open source file system analysis tools—including tools he personally developed. Coverage includes Preserving the digital crime scene and duplicating hard disks for "dead analysis" Identifying hidden data on a disk's Host Protected Area (HPA) Reading source data: Direct versus BIOS access, dead versus live acquisition, error handling, and more Analyzing DOS, Apple, and GPT partitions; BSD disk labels; and Sun Volume Table of Contents using key concepts, data structures, and specific techniques Analyzing the contents of multiple disk volumes, such as RAID and disk spanning Analyzing FAT, NTFS, Ext2, Ext3, UFS1, and UFS2 file systems using key concepts, data structures, and specific techniques Finding evidence: File metadata, recovery of deleted files, data hiding locations, and more Using The Sleuth Kit (TSK), Autopsy Forensic Browser, and related open source tools When it comes to file system analysis, no other book offers this much detail or expertise. Whether you're a digital forensics specialist, incident response team member, law enforcement officer, corporate security specialist, or auditor, this book will become an indispensable resource for forensic investigations, no matter what analysis tools you use.

Exploring Careers in Cybersecurity and Digital Forensics - Lucy K. Tsado 2022-02-15

Exploring Careers in Cybersecurity and Digital

Forensics serves as a career guide, providing information about education, certifications, and tools to help those making career decisions within the cybersecurity field.

Essential Computer Security: Everyone's Guide to Email, Internet, and Wireless Security - T. Bradley 2006-11-08

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

Network Intrusion Analysis - Joe Fichera 2012-11-20

Network Intrusion Analysis addresses the entire process of investigating a network intrusion by: Providing a step-by-step guide to the tools and techniques used in the analysis and investigation of a network intrusion. Providing real-world examples of network intrusions, along with associated workarounds. Walking you through the methodology and practical steps needed to conduct a thorough intrusion investigation and incident response, including a wealth of practical, hands-on tools for incident assessment and mitigation. Network Intrusion Analysis addresses the entire process of investigating a network intrusion. Provides a

step-by-step guide to the tools and techniques used in the analysis and investigation of a network intrusion. Provides real-world examples of network intrusions, along with associated workarounds.

Introductory Computer Forensics - Xiaodong Lin 2018-11-10

This textbook provides an introduction to digital forensics, a rapidly evolving field for solving crimes. Beginning with the basic concepts of computer forensics, each of the book's 21 chapters focuses on a particular forensic topic composed of two parts: background knowledge and hands-on experience through practice exercises. Each theoretical or background section concludes with a series of review questions, which are prepared to test students' understanding of the materials, while the practice exercises are intended to afford students the opportunity to apply the concepts introduced in the section on background knowledge. This experience-oriented textbook is meant to assist students in gaining a better understanding of digital forensics through hands-on practice in collecting and preserving digital evidence by completing various exercises. With 20 student-directed, inquiry-based practice exercises, students will better understand digital forensic concepts and learn digital forensic investigation techniques. This textbook is intended for upper undergraduate and graduate-level students who are taking digital-forensic related courses or working in digital forensics research. It can also be used by digital forensics practitioners, IT security analysts, and security engineers working in the IT security industry, particular IT professionals responsible for digital investigation and incident handling or researchers working in these related fields as a reference book.

Computer Networking for LANS to WANS: Hardware, Software and Security - Kenneth C. Mansfield, Jr.

2009-06-03
Designed for the beginner yet useful for the expert, COMPUTER NETWORKING FROM LANS TO WANS: HARDWARE, SOFTWARE, AND SECURITY provides comprehensive coverage of all aspects of networking. This book contains 24 chapters illustrating network hardware and software, network operating systems, multimedia and the Internet, and computer and network security and forensics. Six appendices provide coverage of the history of the Internet, the ASCII code, the operation of MODEMs, tips on becoming certified in network, security, and forensics, telecommunication technologies, and setting up a computer repair shop. A companion CD includes numerous videos and files that allow the reader to perform important hands-on networking, security, and forensic activities. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Hands-On Oracle Application Express Security - Recx 2013-04-09
An example-driven approach to securing Oracle APEXapplications As a Rapid Application Development framework, Oracle ApplicationExpress (APEX) allows websites to easily be created based on datawithin an Oracle database. Using only a web browser, you candevelop and deploy professional applications that are both fast andsecure. However, as with any website, there is a security risk andthreat, and securing APEX applications requires some specificknowledge of the framework. Written by well-known securityspecialists Recx, this book shows you the correct ways to implementyour APEX applications to ensure that they are not vulnerable toattacks. Real-world examples of a variety of securityvulnerabilities demonstrate attacks and show the techniques andbest practices for making applications secure. Divides

coverage into four sections, three of which cover themain classes of threat faced by web applications and the forthcovers an APEX-specific protection mechanism Addresses the security issues that can arise, demonstratingsecure application design Examines the most common class of vulnerability that allowsattackers to invoke actions on behalf of other users and accesssensitive data The lead-by-example approach featured in this critical bookteaches you basic "hacker" skills in order to show you how tovalidate and secure your APEX applications.

Mind the Tech Gap - Nikki Robinson 2022-10-05

IT and cybersecurity teams have had a long-standing battle between functionality and security. But why? To understand where the problem lies, this book will explore the different job functions, goals, relationships, and other factors that may impact how IT and cybersecurity teams interact. With different levels of budget, competing goals, and a history of lack of communication, there is a lot of work to do to bring these teams together. Empathy and emotional intelligence are common phenomena discussed in leadership books, so why not at the practitioner level? Technical teams are constantly juggling projects, engineering tasks, risk management activities, security configurations, remediating audit findings, and the list goes on. Understanding how psychology and human factors engineering practices can improve both IT and cybersecurity teams can positively impact those relationships, as well as strengthen both functionality and security. There is no reason to have these teams at odds or competing for their own team’s mission; align the missions, and align the teams. The goal is to identify the problems in your own team or organization and apply the principles within to improve how teams communicate, collaborate, and compromise. Each organization will have its

own unique challenges but following the question guide will help to identify other technical gaps horizontally or vertically.

Digital Forensics and Incident Response - Gerard Johansen 2017-07-24

A practical guide to deploying digital forensic techniques in response to cyber security incidents About This Book Learn incident response fundamentals and create an effective incident response framework Master forensics investigation utilizing digital investigative techniques Contains real-life scenarios that effectively use threat intelligence and modeling techniques Who This Book Is For This book is targeted at Information Security professionals, forensics practitioners, and students with knowledge and experience in the use of software applications and basic command-line experience. It will also help professionals who are new to the incident response/digital forensics role within their organization. What You Will Learn Create and deploy incident response capabilities within your organization Build a solid foundation for acquiring and handling suitable evidence for later analysis Analyze collected evidence and determine the root cause of a security incident Learn to integrate digital forensic techniques and procedures into the overall incident response process Integrate threat intelligence in digital evidence analysis Prepare written documentation for use internally or with external parties such as regulators or law enforcement agencies In Detail Digital Forensics and Incident Response will guide you through the entire spectrum of tasks associated with incident response, starting with preparatory activities associated with creating an incident response plan and creating a digital forensics capability within your own organization. You will then begin a detailed examination of digital forensic techniques including acquiring evidence,

examining volatile memory, hard drive assessment, and network-based evidence. You will also explore the role that threat intelligence plays in the incident response process. Finally, a detailed section on preparing reports will help you prepare a written report for use either internally or in a courtroom. By the end of the book, you will have mastered forensic techniques and incident response and you will have a solid foundation on which to increase your ability to investigate such incidents in your organization. Style and approach The book covers practical scenarios and examples in an enterprise setting to give you an understanding of how digital forensics integrates with the overall response to cyber security incidents. You will also learn the proper use of tools and techniques to investigate common cyber security incidents such as malware infestation, memory analysis, disk analysis, and network analysis.

Digital Forensics in the Era of Artificial Intelligence - Nour Moustafa 2022-07-18

Digital forensics plays a crucial role in identifying, analysing, and presenting cyber threats as evidence in a court of law. Artificial intelligence, particularly machine learning and deep learning, enables automation of the digital investigation process. This book provides an in-depth look at the fundamental and advanced methods in digital forensics. It also discusses how machine learning and deep learning algorithms can be used to detect and investigate cybercrimes. This book demonstrates digital forensics and cyber-investigating techniques with real-world applications. It examines hard disk analytics and style architectures, including Master Boot Record and GUID Partition Table as part of the investigative process. It also covers cyberattack analysis in Windows, Linux, and network systems using virtual machines in real-world scenarios. Digital Forensics in the Era of Artificial Intelligence will be

helpful for those interested in digital forensics and using machine learning techniques in the investigation of cyberattacks and the detection of evidence in cybercrimes.

Computer Forensics JumpStart - Michael G. Solomon 2011-03-15

Essential reading for launching a career in computer forensics Internet crime is on the rise, catapulting the need for computer forensics specialists. This new edition presents you with a completely updated overview of the basic skills that are required as a computer forensics professional. The author team of technology security veterans introduces the latest software and tools that exist and they review the available certifications in this growing segment of IT that can help take your career to a new level. A variety of real-world practices take you behind the scenes to look at the root causes of security attacks and provides you with a unique perspective as you launch a career in this fast-growing field. Explores the profession of computer forensics, which is more in demand than ever due to the rise of Internet crime Details the ways to conduct a computer forensics investigation Highlights tips and techniques for finding hidden data, capturing images, documenting your case, and presenting evidence in court as an expert witness Walks you through identifying, collecting, and preserving computer evidence Explains how to understand encryption and examine encryption files Computer Forensics JumpStart is the resource you need to launch a career in computer forensics.

CSO - 2005-11

The business to business trade publication for information and physical Security professionals.

Fundamentals of Digital Forensics - Joakim Kävrestad 2020-05-19

This practical and accessible textbook/reference describes the theory and methodology of digital forensic examinations, presenting examples developed in collaboration with police authorities to ensure relevance

to real-world practice. The coverage includes discussions on forensic artifacts and constraints, as well as forensic tools used for law enforcement and in the corporate sector. Emphasis is placed on reinforcing sound forensic thinking, and gaining experience in common tasks through hands-on exercises. This enhanced second edition has been expanded with new material on incident response tasks and computer memory analysis. Topics and features: Outlines what computer forensics is, and what it can do, as well as what its limitations are Discusses both the theoretical foundations and the fundamentals of forensic methodology Reviews broad principles that are applicable worldwide Explains how to find and interpret several important artifacts Describes free and open source software tools, along with the AccessData Forensic Toolkit Features exercises and review questions throughout, with solutions provided in the appendices Includes numerous practical examples, and provides supporting video lectures online This easy-to-follow primer is an essential resource for students of computer forensics, and will also serve as a valuable reference for practitioners seeking instruction on performing forensic examinations. Joakim Kävrestad is a lecturer and researcher at the University of Skövde, Sweden, and an AccessData Certified Examiner. He also serves as a forensic consultant, with several years of experience as a forensic expert with the Swedish police.

Implementing Digital Forensic Readiness - Jason Sachowski 2019-05-29

Implementing Digital Forensic Readiness: From Reactive to Proactive Process, Second Edition presents the optimal way for digital forensic and IT security professionals to implement a proactive approach to digital forensics. The book details how digital forensic processes can align strategically with business operations and an already existing information and data

security program. Detailing proper collection, preservation, storage, and presentation of digital evidence, the procedures outlined illustrate how digital evidence can be an essential tool in mitigating risk and redusing the impact of both internal and external, digital incidents, disputes, and crimes. By utilizing a digital forensic readiness approach and stances, a company's preparedness and ability to take action quickly and respond as needed. In addition, this approach enhances the ability to gather evidence, as well as the relevance, reliability, and credibility of any such evidence. New chapters to this edition include Chapter 4 on Code of Ethics and Standards, Chapter 5 on Digital Forensics as a Business, and Chapter 10 on Establishing Legal Admissibility. This book offers best practices to professionals on enhancing their digital forensic program, or how to start and develop one the right way for effective forensic readiness in any corporate or enterprise setting.

Computer Forensics JumpStart - Micah Solomon 2015-03-24

Launch Your Career in Computer Forensics—Quickly and Effectively Written by a team of computer forensics experts, Computer Forensics JumpStart provides all the core information you need to launch your career in this fast-growing field: Conducting a computer forensics investigation Examining the layout of a network Finding hidden data Capturing images Identifying, collecting, and preserving computer evidence Understanding encryption and examining encrypted files Documenting your case Evaluating common computer forensic tools Presenting computer evidence in court as an expert witness

Principles of Incident Response and Disaster Recovery - Michael E. Whitman 2021-01-01

Learn how to identify vulnerabilities within computer networks and implement countermeasures that mitigate risks and damage with

Whitman/Mattord's PRINCIPLES OF INCIDENT RESPONSE & DISASTER RECOVERY, 3rd Edition. This edition offers the knowledge you need to help organizations prepare for and avert system interruptions and natural disasters. Comprehensive coverage addresses information security and IT in contingency planning today. Updated content focuses on incident response and disaster recovery. You examine the complexities of organizational readiness from an IT and business perspective with emphasis on management practices and policy requirements. You review industry's best practices for minimizing downtime in emergencies and curbing losses during and after system service interruptions. This edition includes the latest NIST knowledge, expanded coverage of security information and event management (SIEM) and unified threat management, and more explanation of cloud-based systems and Web-accessible tools to prepare you for success. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Guide to Computer Forensics and Investigations - Bill Nelson 2014-11-07

Updated with the latest advances from the field, GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS, Fifth Edition combines all-encompassing topic coverage and authoritative information from seasoned experts to deliver the most comprehensive forensics resource available. This proven author team's wide ranging areas of expertise mirror the breadth of coverage provided in the book, which focuses on techniques and practices for gathering and analyzing evidence used to solve crimes involving computers. Providing clear instruction on the tools and techniques of the trade, it introduces readers to every step of the computer forensics investigation-from lab set-up to testifying in court. It also details step-by-step guidance

on how to use current forensics software. Appropriate for learners new to the field, it is also an excellent refresher and technology update for professionals in law enforcement, investigations, or computer security. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Network Forensics - Ric Messier 2017-08-07 Intensively hands-on training for real-world network forensics Network Forensics provides a uniquely practical guide for IT and law enforcement professionals seeking a deeper understanding of cybersecurity. This book is hands-on all the way—by dissecting packets, you gain fundamental knowledge that only comes from experience. Real packet captures and log files demonstrate network traffic investigation, and the learn-by-doing approach relates the essential skills that traditional forensics investigators may not have. From network packet analysis to host artifacts to log analysis and beyond, this book emphasizes the critical techniques that bring evidence to light. Network forensics is a growing field, and is becoming increasingly central to law enforcement as cybercrime becomes more and more sophisticated. This book provides an unprecedented level of hands-on training to give investigators the skills they need. Investigate packet captures to examine network communications Locate host-based artifacts and analyze network logs Understand intrusion detection systems—and let them do the legwork Have the right architecture and systems in place ahead of an incident Network data is always changing, and is never saved in one place; an investigator must understand how to examine data over time, which involves specialized skills that go above and beyond memory, mobile, or data forensics. Whether you're preparing for a security

certification or just seeking deeper training for a law enforcement or IT role, you can only learn so much from concept; to thoroughly understand something, you need to do it. Network Forensics provides intensive hands-on practice with direct translation to real-world application.

Hack the Cybersecurity Interview - Ken Underhill 2022-07-27

Get your dream job and set off on the right path to achieving success in the cybersecurity field with expert tips on preparing for interviews, understanding cybersecurity roles, and more Key FeaturesGet well-versed with the interview process for cybersecurity job rolesPrepare for SOC analyst, penetration tester, malware analyst, digital forensics analyst, CISO, and more rolesUnderstand different key areas in each role and prepare for themBook Description This book is a comprehensive guide that helps both entry-level and experienced cybersecurity professionals prepare for interviews in a wide variety of career areas. Complete with the authors' answers to different cybersecurity interview questions, this easy-to-follow and actionable book will help you get ready and be confident. You'll learn how to prepare and form a winning strategy for job interviews. In addition to this, you'll also understand the most common technical and behavioral interview questions, learning from real cybersecurity professionals and executives with years of industry experience. By the end of this book, you'll be able to apply the knowledge you've gained to confidently pass your next job interview and achieve success on your cybersecurity career path. What you will learnUnderstand the most common and important cybersecurity rolesFocus on interview preparation for key cybersecurity areasIdentify how to answer important behavioral questionsBecome well versed in the technical side of the interviewGrasp key

cybersecurity role-based questions and their answersDevelop confidence and handle stress like a proWho this book is for This cybersecurity book is for college students, aspiring cybersecurity professionals, computer and software engineers, and anyone looking to prepare for a job interview for any cybersecurity role. The book is also for experienced cybersecurity professionals who want to improve their technical and behavioral interview skills. Recruitment managers can also use this book to conduct interviews and tests.

Digital Forensics, Investigation, and Response - Chuck Easttom 2021-08-10

Digital Forensics, Investigation, and Response, Fourth Edition examines the fundamentals of system forensics, addresses the tools, techniques, and methods used to perform computer forensics and investigation, and explores incident and intrusion response,

Information Security Education – Towards a Cybersecure Society - Lynette Drevin 2018-09-10

This book constitutes the refereed proceedings of the 11th IFIP WG 11.8 World Conference on Information Security Education, WISE 11, held at the 24th IFIP World Computer Congress, WCC 2018, in Poznan, Poland, in September 2018. The 11 revised papers presented were carefully reviewed and selected from 25 submissions. They focus on cybersecurity and are organized in the following topical sections: information security learning techniques; information security training and awareness; and information security courses and curricula.

Computer and Information Security Handbook - John R. Vacca 2017-05-10

Computer and Information Security Handbook, Third Edition, provides the most current and complete reference on computer security available in one volume. The book offers deep coverage of an extremely wide range of

issues in computer and cybersecurity theory, applications, and best practices, offering the latest insights into established and emerging technologies and advancements. With new parts devoted to such current topics as Cloud Security, Cyber-Physical Security, and Critical Infrastructure Security, the book now has 100 chapters written by leading experts in their fields, as well as 12 updated appendices and an expanded glossary. It continues its successful format of offering problem-solving techniques that use real-life case studies, checklists, hands-on exercises, question and answers, and summaries. Chapters new to this edition include such timely topics as Cyber Warfare, Endpoint Security, Ethical Hacking, Internet of Things Security, Nanoscale Networking and Communications Security, Social Engineering, System Forensics, Wireless Sensor Network Security, Verifying User and Host Identity, Detecting System Intrusions, Insider Threats, Security Certification and Standards Implementation, Metadata Forensics, Hard Drive Imaging, Context-Aware Multi-Factor Authentication, Cloud Security, Protecting Virtual Infrastructure, Penetration Testing, and much more. Written by leaders in the field Comprehensive and up-to-date coverage of the latest security technologies, issues, and best practices Presents methods for analysis, along with problem-solving techniques for implementing practical solutions

Digital Forensics with Open Source Tools - Cory Altheide 2011-03-29

Digital Forensics with Open Source Tools is the definitive book on investigating and analyzing computer systems and media using open source tools. The book is a technical procedural guide, and explains the use of open source tools on Mac, Linux and Windows systems as a platform for performing computer forensics. Both well-known and novel forensic methods are

demonstrated using command-line and graphical open source computer forensic tools for examining a wide range of target systems and artifacts. Written by world-renowned forensic practitioners, this book uses the most current examination and analysis techniques in the field. It consists of 9 chapters that cover a range of topics such as the open source examination platform; disk and file system analysis; Windows systems and artifacts; Linux systems and artifacts; Mac OS X systems and artifacts; Internet artifacts; and automating analysis and extending capabilities. The book lends itself to use by students and those entering the field who do not have means to purchase new tools for different investigations. This book will appeal to forensic practitioners from areas including incident response teams and computer forensic investigators; forensic technicians from legal, audit, and consulting firms; and law enforcement agencies. Written by world-renowned forensic practitioners Details core concepts and techniques of forensic file system analysis Covers analysis of artifacts from the Windows, Mac, and Linux operating systems

Practical Cyber Forensics - Niranjan Reddy 2019-08-09 Become an effective cyber forensics investigator and gain a collection of practical, efficient techniques to get the job done. Diving straight into a discussion of anti-forensic techniques, this book shows you the many ways to effectively detect them. Now that you know what you are looking for, you'll shift your focus to network forensics, where you cover the various tools available to make your network forensics process less complicated. Following this, you will work with cloud and mobile forensic techniques by considering the concept of forensics as a service (FaSS), giving you cutting-edge skills that will future-proof your career. Building on this, you will learn the process of breaking down malware attacks, web attacks, and email

scams with case studies to give you a clearer view of the techniques to be followed. Another tricky technique is SSD forensics, so the author covers this in detail to give you the alternative analysis techniques you'll need. To keep you up to speed on contemporary forensics, Practical Cyber Forensics includes a chapter on Bitcoin forensics, where key crypto-currency forensic techniques will be shared. Finally, you will see how to prepare accurate investigative reports. What You Will Learn Carry out forensic investigation on Windows, Linux, and macOS systems Detect and counter anti-forensic techniques Deploy network, cloud, and mobile forensics Investigate web and malware attacks Write efficient investigative reports Who This Book Is For Intermediate infosec professionals looking for a practical approach to investigative cyber forensics techniques.

Practical Cyber Forensics - Niranjan Reddy 2019-07-16 Become an effective cyber forensics investigator and gain a collection of practical, efficient techniques to get the job done. Diving straight into a discussion of anti-forensic techniques, this book shows you the many ways to effectively detect them. Now that you know what you are looking for, you'll shift your focus to network forensics, where you cover the various tools available to make your network forensics process less complicated. Following this, you will work with cloud and mobile forensic techniques by considering the concept of forensics as a service (FaSS), giving you cutting-edge skills that will future-proof your career. Building on this, you will learn the process of breaking down malware attacks, web attacks, and email scams with case studies to give you a clearer view of the techniques to be followed. Another tricky technique is SSD forensics, so the author covers this in detail to give you the alternative analysis techniques you'll need. To keep you up to speed on

contemporary forensics, Practical Cyber Forensics includes a chapter on Bitcoin forensics, where key crypto-currency forensic techniques will be shared. Finally, you will see how to prepare accurate investigative reports. What You Will LearnCarry out forensic investigation on Windows, Linux, and macOS systems Detect and counter anti-forensic techniques Deploy network, cloud, and mobile forensics Investigate web and malware attacks Write efficient investigative reports Who This Book Is For Intermediate infosec professionals looking for a practical approach to investigative cyber forensics techniques.

Digital Forensics with Kali Linux - Shiva V. N Parasram 2017-12-19

Learn the skills you need to take advantage of Kali Linux for digital forensics investigations using this comprehensive guide Key Features Master powerful Kali Linux tools for digital investigation and analysis Perform evidence acquisition, preservation, and analysis using various tools within Kali Linux Implement the concept of cryptographic hashing and imaging using Kali Linux Perform memory forensics with Volatility and internet forensics with Xplico. Discover the capabilities of professional forensic tools such as Autopsy and DFF (Digital Forensic Framework) used by law enforcement and military personnel alike Book Description Kali Linux is a Linux-based distribution used mainly for penetration testing and digital forensics. It has a wide range of tools to help in forensics investigations and incident response mechanisms. You will start by understanding the fundamentals of digital forensics and setting up your Kali Linux environment to perform different investigation practices. The book will delve into the realm of operating systems and the various formats for file storage, including secret hiding places unseen by the end user or even the operating system. The book will also teach you to create

forensic images of data and maintain integrity using hashing tools. Next, you will also master some advanced topics such as autopsies and acquiring investigation data from the network, operating system memory, and so on. The book introduces you to powerful tools that will take your forensic abilities and investigations to a professional level, catering for all aspects of full digital forensic investigations from hashing to reporting. By the end of this book, you will have had hands-on experience in implementing all the pillars of digital forensics--acquisition, extraction, analysis, and presentation using Kali Linux tools. What you will learn Get to grips with the fundamentals of digital forensics and explore best practices Understand the workings of file systems, storage, and data fundamentals Discover incident response procedures and best practices Use DC3DD and Guymager for acquisition and preservation techniques Recover deleted data with Foremost and Scalpel Find evidence of accessed programs and malicious programs using Volatility. Perform network and internet capture analysis with Xplico Carry out professional digital forensics investigations using the DFF and Autopsy automated forensic suites Who this book is for This book is targeted at forensics and digital investigators, security analysts, or any stakeholder interested in learning digital forensics using Kali Linux. Basic knowledge of Kali Linux will be an advantage.

Windows Forensics Cookbook - Oleg Skulkin 2017-08-04

Maximize the power of Windows Forensics to perform highly effective forensic investigationsAbout This Book* Prepare and perform investigations using powerful tools for Windows,* Collect and validate evidence from suspects and computers and uncover clues that are otherwise difficult* Packed with powerful recipes to perform highly effective field investigationsWho This Book Is

ForIf you are a forensic analyst or incident response professional who wants to perform computer forensics investigations for the Windows platform and expand your took kit, then this book is for you.What You Will Learn* Understand the challenges of acquiring evidence from Windows systems and overcome them* Acquire and analyze Windows memory and drive data with modern forensic tools.* Extract and analyze data from Windows file systems, shadow copies and the registry* Understand the main Windows system artifacts and learn how to parse data from them using forensic tools* See a forensic analysis of common web browsers, mailboxes, and instant messenger services* Discover how Windows 10 differs from previous versions and how to overcome the specific challenges it presents* Create a graphical timeline and visualize data, which can then be incorporated into the final report* Troubleshoot issues that arise while performing Windows forensicsIn DetailWindows Forensics Cookbook provides recipes to overcome forensic challenges and helps you carry out effective investigations easily on a Windows platform. You will begin with a refresher on digital forensics and evidence acquisition, which will help you to understand the challenges faced while acquiring evidence from Windows systems. Next you will learn to acquire Windows memory data and analyze Windows systems with modern forensic tools. We also cover some more in-depth elements of forensic analysis, such as how to analyze data from Windows system artifacts, parse data from the most commonly-used web browsers and email services, and effectively report on digital forensic investigations.You will see how Windows 10 is different from previous versions and how you can overcome the specific challenges it brings. Finally, you will learn to troubleshoot issues that arise while performing digital forensic

investigations.By the end of the book, you will be able to carry out forensics investigations efficiently.Style and approachThis practical guide filled with hands-on, actionable recipes to detect, capture, and recover digital artifacts and deliver impeccable forensic outcomes.

Incident Response & Computer Forensics, Third Edition - Jason T. Luttgens 2014-08-01

The definitive guide to incident response--updated for the first time in a decade! Thoroughly revised to cover the latest and most effective tools and techniques, Incident Response & Computer Forensics, Third Edition arms you with the information you need to get your organization out of trouble when data breaches occur. This practical resource covers the entire lifecycle of incident response, including preparation, data collection, data analysis, and remediation. Real-world case studies reveal the methods behind--and remediation strategies for--today's most insidious attacks. Architect an infrastructure that allows for methodical investigation and remediation Develop leads, identify indicators of compromise, and determine incident scope Collect and preserve live data Perform forensic duplication Analyze data from networks, enterprise services, and applications Investigate Windows and Mac OS X systems Perform malware triage Write detailed incident response reports Create and implement comprehensive remediation plans

Certified Ethical Hacker (CEH) Foundation Guide - Sagar Ajay Rahalkar 2016-11-29

Prepare for the CEH training course and exam by gaining a solid foundation of knowledge of key fundamentals such as operating systems, databases, networking, programming, cloud, and virtualization. Based on this foundation, the book moves ahead with simple concepts from the hacking world. The Certified Ethical Hacker (CEH) Foundation Guide also takes you through various career paths available upon completion of the CEH

course and also prepares you to face job interviews when applying as an ethical hacker. The book explains the concepts with the help of practical real-world scenarios and examples. You'll also work with hands-on exercises at the end of each chapter to get a feel of the subject. Thus this book would be a valuable resource to any individual planning to prepare for the CEH certification course. What You Will Learn Gain the basics of hacking (apps, wireless devices, and mobile platforms) Discover useful aspects of databases and operating systems from a hacking perspective Develop sharper programming and networking skills for the exam Explore the penetration testing life cycle Bypass security appliances like IDS, IPS, and honeypots Grasp the key concepts of cryptography Discover the career paths available after certification Revise key interview questions for a certified ethical hacker Who This Book Is For Beginners in the field of ethical hacking and information security, particularly those who are interested in the CEH course and certification.

Antivirus Bypass Techniques - Nir Yehoshua 2021-07-16 Develop more secure and effective antivirus solutions by leveraging antivirus bypass techniques Key FeaturesGain a clear understanding of the security landscape and research approaches to bypass antivirus softwareBecome well-versed with practical techniques to bypass antivirus solutionsDiscover best practices to develop robust antivirus solutionsBook Description Antivirus software is built to detect, prevent, and remove malware from systems, but this does not guarantee the security of your antivirus solution as certain changes can trick the antivirus and pose a risk for users. This book will help you to gain a basic understanding of antivirus software and take you through a series of antivirus bypass techniques that will enable you to bypass antivirus solutions. The book starts by introducing you to the cybersecurity

landscape, focusing on cyber threats, malware, and more. You will learn how to collect leads to research antivirus and explore the two common bypass approaches used by the authors. Once you've covered the essentials of antivirus research and bypassing, you'll get hands-on with bypassing antivirus software using obfuscation, encryption, packing, PowerShell, and more. Toward the end, the book covers security improvement recommendations, useful for both antivirus vendors as well as for developers to help strengthen the security and malware detection capabilities of antivirus software. By the end of this security book, you'll have a better understanding of antivirus software and be able to confidently bypass antivirus software. What you will learnExplore the security landscape and get to grips with the fundamentals of antivirus softwareDiscover how to gather AV bypass research leads using malware analysis toolsUnderstand the two commonly used antivirus bypass approachesFind out how to bypass static and dynamic antivirus enginesUnderstand and implement bypass techniques in real-world scenariosLeverage best practices and recommendations for implementing antivirus solutionsWho this book is for This book is for security researchers, malware analysts, reverse engineers, pentesters, antivirus vendors looking to strengthen their detection capabilities, antivirus users and companies that want to test and evaluate their antivirus software, organizations that want to test and evaluate antivirus software before purchase or acquisition, and tech-savvy individuals who want to learn new topics.

What Every Engineer Should Know About Cyber Security and Digital Forensics - Joanna F. DeFranco 2022-12-01 Most organizations place a high priority on keeping data secure, but not every organization invests in training its engineers or employees in

understanding the security risks involved when using or developing technology. Designed for the non-security professional, What Every Engineer Should Know About Cyber Security and Digital Forensics is an overview of the field of cyber security. The Second Edition updates content to address the most recent cyber security concerns and introduces new topics such as business changes and outsourcing. It includes new cyber security risks such as Internet of Things and Distributed Networks (i.e., blockchain) and adds new sections on strategy based on the OODA (observe-orient-decide-act) loop in the cycle. It also includes an entire chapter on tools used by the professionals in the field. Exploring the cyber security topics that every engineer should understand, the book discusses network and personal data security, cloud and mobile computing, preparing for an incident and incident response, evidence handling, internet usage, law and compliance, and security forensic certifications. Application of the concepts is demonstrated through short case studies of real-world incidents chronologically delineating related events. The book also discusses certifications and reference manuals in the areas of cyber security and digital forensics. By mastering the principles in this volume, engineering professionals will not only better understand how to mitigate the risk of security incidents and keep their data secure, but also understand how to break into this expanding profession.

Computer Forensics: Investigation Procedures and Response (CHFI) - EC-Council 2016-04-11

The Computer Forensic Series by EC-Council provides the knowledge and skills to identify, track, and prosecute the cyber-criminal. The series is comprised of four books covering a broad base of topics in Computer Hacking Forensic Investigation, designed to expose the reader to the

process of detecting attacks and collecting evidence in a forensically sound manner with the intent to report crime and prevent future attacks. Learners are introduced to advanced techniques in computer investigation and analysis with interest in generating potential legal evidence. In full, this and the other three books provide preparation to identify evidence in computer related crime and abuse cases as well as track the intrusive hacker's path through a client system. The series and accompanying labs help prepare the security student or professional to profile an intruder's footprint and gather all necessary information and evidence to support prosecution in a court of law. The first book in the Computer Forensics series is Investigation Procedures and Response. Coverage includes a basic understanding of the importance of computer forensics, how to set up a secure lab, the process for forensic investigation including first responder responsibilities, how to handle various incidents and information on the various reports used by computer forensic investigators. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Proceedings of the Thirteenth International Conference on Management Science and Engineering Management - Jiuping Xu 2019-06-19

This book gathers the proceedings of the 13th International Conference on Management Science and Engineering Management (ICMSEM 2019), which was held at Brock University, Ontario, Canada on August 5–8, 2019. Exploring the latest ideas and pioneering research achievements in management science and engineering management, the respective contributions highlight both theoretical and practical studies on management science and computing methodologies, and present advanced management

concepts and computing technologies for decision-making problems involving large, uncertain and unstructured data. Accordingly, the proceedings offer researchers and practitioners in related fields an essential update, as well as a source of new research directions.

Hands-On Network Forensics - Nipun Jaswal 2019-03-30

Gain basic skills in network forensics and learn how to apply them effectively Key FeaturesInvestigate network threats with easePractice forensics tasks such as intrusion detection, network analysis, and scanningLearn forensics investigation at the network levelBook Description Network forensics is a subset of digital forensics that deals with network attacks and their investigation. In the era of network attacks and malware threat, it’s now more important than ever to have skills to investigate network attacks and vulnerabilities. Hands-On Network Forensics starts with the core concepts within network forensics, including coding, networking, forensics tools, and methodologies for forensic investigations. You’ll then explore the tools used for network forensics, followed by understanding how to apply those tools to a PCAP file and write the accompanying report. In addition to this, you will understand how statistical flow analysis, network enumeration, tunneling and encryption, and malware detection can be used to investigate your network. Towards the end of this book, you will discover how network correlation works and how to bring all the information from different types of network devices together. By the end of this book, you will have gained hands-on experience of performing forensics analysis tasks. What you will learnDiscover and interpret encrypted trafficLearn about various protocolsUnderstand the malware language over wireGain insights into the most widely used malwareCorrelate data collected from attacksDevelop tools and

custom scripts for network forensics automationWho this book is for The book targets incident responders, network engineers, analysts, forensic engineers and network administrators who want to extend their knowledge from the surface to the deep levels of understanding the science behind network protocols, critical indicators in an incident and conducting a forensic search over the wire.