Digital Forensics For Handheld Devices 1st Edition By Doherty Eamon P 2012 Hardcover

"This book addresses the topics related to artificial intelligence, internet of things, blockchain technology, and machine learning and brings together researchers, developers, practitioners, and users interested in cybersecurity and forensics"--

Provides information on analyzing wireless networks through wardriving and penetration testing.

Digital forensics deals with the acquisition, preservation, examination, analysis and presentation of electronic evidence. Networked computing, wireless communications and portable electronic devices have expanded the role of digital forensics beyond traditional computer crime investigations. Practically every crime now involves some aspect of digital evidence; digital forensics provides the techniques and tools to articulate this evidence. Digital forensics also has myriad intelligence applications. Furthermore, it has a vital role in information assurance - investigations of security breaches yield valuable information that can be used to design more secure systems. Advances in Digital Forensics V describes original research results and innovative applications in the discipline of

digital forensics. In addition, it highlights some of the major technical and legal issues related to digital evidence and electronic crime investigations. The areas of coverage include: themes and issues, forensic techniques, integrity and privacy, network forensics, forensic computing, investigative techniques, legal issues and evidence management. This book is the fifth volume in the annual series produced by the International Federation for Information Processing (IFIP) Working Group 11.9 on Digital Forensics, an international community of scientists, engineers and practitioners dedicated to advancing the state of the art of research and practice in digital forensics. The book contains a selection of twenty-three edited papers from the Fifth Annual IFIP WG 11.9 International Conference on Digital Forensics, held at the National Center for Forensic Science, Orlando, Florida, USA in the spring of 2009. Advances in Digital Forensics V is an important resource for researchers, faculty members and graduate students, as well as for practitioners and individuals engaged in research and development efforts for the law enforcement and intelligence communities. The need to professionally and successfully conduct computer forensic investigations of incidents and crimes has never been greater. This has caused an increased requirement for information about the creation and management of computer forensic laboratories and the

investigations themselves. This includes a great need for information on how to cost-effectively establish and manage a computer forensics laboratory. This book meets that need: a clearly written, non-technical book on the topic of computer forensics with emphasis on the establishment and management of a computer forensics laboratory and its subsequent support to successfully conducting computer-related crime investigations. Provides guidance on creating and managing a computer forensics lab Covers the regulatory and legislative environment in the US and Europe Meets the needs of IT professionals and law enforcement as well as consultants

Building a Digital Forensic Laboratory

Advances in Computing and Communications, Part I

Hacking Exposed Computer Forensics

Digital Forensics Explained

An Introduction

What Every Engineer Should Know About Cyber Security and Digital Forensics

Investigate computer crime, corporate malfeasance, and hacker break-ins quickly and effectively with help from this practical and comprehensive resource. You'll get expert information on crucial procedures to successfully prosecute violators while avoiding the pitfalls of illicit searches, privacy violations, and illegally obtained evidence. It's all here--from collecting actionable evidence, re-creating the criminal timeline, and zeroing in on a suspect to

uncovering obscured and deleted code, unlocking encrypted files, and preparing lawful affidavits. Plus, you'll get in-depth coverage of the latest PDA and cell phone investigation techniques and real-world case studies.

The widespread use of information and communications technology (ICT) has created a global platform for the exchange of ideas, goods and services, the benefits of which are enormous. However, it has also created boundless opportunities for fraud and deception. Cybercrime is one of the biggest growth industries around the globe, whether it is in the form of violation of company policies, fraud, hate crime, extremism, or terrorism. It is therefore paramount that the security industry raises its game to combat these threats. Today's top priority is to use computer technology to fight computer crime, as our commonwealth is protected by firewalls rather than firepower. This is an issue of global importance as new technologies have provided a world of opportunity for criminals.This book is a compilation of the collaboration between the researchers and practitioners in the security field; and provides a comprehensive literature on current and future e-security needs across applications, implementation, testing or investigative techniques, judicial processes and criminal intelligence. The intended audience includes members in academia, the public and private sectors, students and

those who are interested in and will benefit from this handbook.
Cell phones and other handheld devices incorporating cell phone capabilities (e.g., Personal Digital Assistants (PDAs) phones) are ubiquitous. Rather than just placing calls, certain phones allow users to perform additional tasks such as SMS (Short Message Service) messaging, Multi-Media Messaging Service (MMS) messaging, IM (Instant Messaging), electronic mail, Web browsing, and basic PIM (Personal Information Management) applications (e.g., phone and date book). PDA phones, often referred to as smart phones, provide users with the combined capabilities of both a cell phone and a PDA. In addition to network services and basic PIM applications, one can manage more extensive appointment and contact information, review electronic documents, give a presentation, and perform other tasks. All but the most basic phones provide individuals with some ability to load additional applications, store and process personal and sensitive information independently of a desktop or notebook computer, and optionally synchronize the results at some later time. As digital technology evolves, the capabilities of these devices continue to improve rapidly. When cell phones or other cellular devices are involved in a crime or other incident, forensic examiners require tools that allow the proper retrieval and speedy examination of information present on the device. This

report gives an overview of current forensic software, designed for acquisition, examination, and reporting of data discovered on cellular handheld devices, and an understanding of their capabilities and limitations.

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.

Digital Evidence and Computer Crime

Computer Forensics

Challenges and Future Trends

Working in the Global Information Environment

Meeting the Requirements of ISO 17020, ISO 17025, ISO 27001 and Best Practice Requirements

Practical Mobile Forensics

Master the skills you need to conduct a successful digital investigation with Nelson/Phillips/Steuart's GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS, Sixth Edition--the most comprehensive forensics resource available. Providing clear instruction on the tools and techniques of the trade, it walks you through every step of the computer forensics investigation--from lab setup to testifying in court. The authors also thoroughly explain how to use current forensics software. The text includes the most up-to-date coverage available of Linux and Macintosh, virtual

machine software such as VMware and Virtual Box, Android, mobile devices, handheld devices, cloud forensics, email, social media and the Internet of Anything. 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.

The emergence of the World Wide Web, smartphones, and Computer-Mediated Communications (CMCs) profoundly affect the way in which people interact online and offline. Individuals who engage in socially unacceptable or outright criminal acts increasingly utilize technology to connect with one another in ways that are not otherwise possible in the real world due to shame, social stigma, or risk of detection. As a consequence, there are now myriad opportunities for wrongdoing and abuse through technology. This book offers a comprehensive and integrative introduction to cybercrime. It is the first to connect the disparate literature on the various types of cybercrime, the investigation and detection of cybercrime and the role of digital information, and the wider role of technology as a facilitator for social relationships between deviants and criminals. It includes coverage of: key theoretical and methodological perspectives, computer hacking and digital piracy, economic

crime and online fraud, pornography and online sex crime, cyber-bulling and cyber-stalking, cyber-terrorism and extremism, digital forensic investigation and its legal context, cybercrime policy. This book includes lively and engaging features, such as discussion questions, boxed examples of unique events and key figures in offending, quotes from interviews with active offenders and a full glossary of terms. It is supplemented by a companion website that includes further students exercises and instructor resources. This text is essential reading for courses on cybercrime, cyber-deviancy, digital forensics, cybercrime investigation and the sociology of technology.

When it comes to computer crimes, the criminals got a big head start. But the law enforcement and IT security communities are now working diligently to develop the knowledge, skills, and tools to successfully investigate and prosecute Cybercrime cases. When the first edition of "Scene of the Cybercrime" published in 2002, it was one of the first books that educated IT security professionals and law enforcement how to fight Cybercrime. Over the past 5 years a great deal has changed in how computer crimes are perpetrated and subsequently investigated. Also, the IT security and law enforcement communities have dramatically improved their ability to deal with Cybercrime, largely as a result of increased spending and training. According to the 2006

Computer Security Institute's and FBI's joint Cybercrime report: 52% of companies reported unauthorized use of computer systems in the prior 12 months. Each of these incidents is a Cybecrime requiring a certain level of investigation and remediation. And in many cases, an investigation is mandates by federal compliance regulations such as Sarbanes-Oxley, HIPAA, or the Payment Card Industry (PCI) Data Security Standard. Scene of the Cybercrime, Second Edition is a completely revised and updated book which covers all of the technological, legal, and regulatory changes, which have occurred since the first edition. The book is written for dual audience; IT security professionals and members of law enforcement. It gives the technical experts a little peek into the law enforcement world, a highly structured environment where the "letter of the law" is paramount and procedures must be followed closely lest an investigation be contaminated and all the evidence collected rendered useless. It also provides law enforcement officers with an idea of some of the technical aspects of how cyber crimes are committed, and how technology can be used to track down and build a case against the criminals who commit them. Scene of the Cybercrime, Second Editions provides a roadmap that those on both sides of the table can use to navigate the legal and technical landscape to understand, prevent, detect, and successfully prosecute the criminal behavior that is as much a threat to the online

community as "traditional" crime is to the neighborhoods in which we live. Also included is an all new chapter on Worldwide Forensics Acts and Laws. * Companion Web site provides custom tools and scripts, which readers can download for conducting digital, forensic investigations. * Special chapters outline how Cybercrime investigations must be reported and investigated by corporate IT staff to meet federal mandates from Sarbanes Oxley, and the Payment Card Industry (PCI) Data Security Standard * Details forensic investigative techniques for the most common operating systems (Windows, Linux and UNIX) as well as cutting edge devices including iPods, Blackberries, and cell phones.

This is the first digital forensics book that covers the complete lifecycle of digital evidence and the chain of custody. This comprehensive handbook includes international procedures, best practices, compliance, and a companion web site with downloadable forms. Written by world-renowned digital forensics experts, this book is a must for any digital forensics lab. It provides anyone who handles digital evidence with a guide to proper procedure throughout the chain of custody--from incident response through analysis in the lab. A step-by-step guide to designing, building and using a digital forensics lab A comprehensive guide for all roles in a digital forensics laboratory Based on international standards and certifications

Scene of the Cybercrime

Confluence of AI, Machine, and Deep Learning in Cyber Forensics

Searching and Seizing Computers and Obtaining Electronic Evidence in Criminal Investigations

High-technology-crime Investigator's Handbook

Guide to Computer Forensics and Investigations, Loose-Leaf Version

Handbook Of Electronic Security And Digital Forensics

Digital Forensics for Handheld DevicesCRC Press

Mobile phone forensics is the science of recovering digital evidence from a mobile phone under forensically sound conditions using accepted methods. Mobile phones, especially those with advanced capabilities, are a relatively recent phenomenon, not usually covered in classical computer forensics. This guide attempts to bridge that gap by providing an in-depth look into mobile phones and explaining the technologies involved and their relationship to forensic procedures. It covers phones with features beyond simple voice communication and text messaging and their technical and operating characteristics. This guide also discusses procedures for the preservation, acquisition, examination, analysis, and reporting of digital information present on cell phones, as well as available forensic software tools that support those activities.

Developing a knowledge model helps to formalize the difficult task of analyzing crime incidents in addition to preserving and presenting the digital evidence for legal processing. The use of data analytics techniques to

collect evidence assists forensic investigators in following the standard set of forensic procedures, techniques, and methods used for evidence collection and extraction. Varieties of data sources and information can be uniquely identified, physically isolated from the crime scene, protected, stored, and transmitted for investigation using AI techniques. With such large volumes of forensic data being processed, different deep learning techniques may be employed. Confluence of AI, Machine, and Deep Learning in Cyber Forensics contains cutting-edge research on the latest AI techniques being used to design and build solutions that address prevailing issues in cyber forensics and that will support efficient and effective investigations. This book seeks to understand the value of the deep learning algorithm to handle evidence data as well as the usage of neural networks to analyze investigation data. Other themes that are explored include machine learning algorithms that allow machines to interact with the evidence, deep learning algorithms that can handle evidence acquisition and preservation, and techniques in both fields that allow for the analysis of huge amounts of data collected during a forensic investigation. This book is ideally intended for forensics experts, forensic investigators, cyber forensic practitioners, researchers, academicians, and students interested in cyber forensics, computer science and engineering, information technology, and electronics and communication.

CYBER SECURITY AND DIGITAL FORENSICS Cyber security is an incredibly important issue that is

constantly changing, with new methods, processes, and technologies coming online all the time. Books like this are invaluable to professionals working in this area, to stay abreast of all of these changes. Current cyber threats are getting more complicated and advanced with the rapid evolution of adversarial techniques. Networked computing and portable electronic devices have broadened the role of digital forensics beyond traditional investigations into computer crime. The overall increase in the use of computers as a way of storing and retrieving high-security information requires appropriate security measures to protect the entire computing and communication scenario worldwide. Further, with the introduction of the internet and its underlying technology, facets of information security are becoming a primary concern to protect networks and cyber infrastructures from various threats. This groundbreaking new volume, written and edited by a wide range of professionals in this area, covers broad technical and socio-economic perspectives for the utilization of information and communication technologies and the development of practical solutions in cyber security and digital forensics. Not just for the professional working in the field, but also for the student or academic on the university level, this is a must-have for any library. Audience: Practitioners, consultants, engineers, academics, and other professionals working in the areas of cyber analysis, cyber security, homeland security, national defense, the protection of national critical infrastructures, cyber-crime, cyber

vulnerabilities, cyber-attacks related to network systems, cyber threat reduction planning, and those who provide leadership in cyber security management both in public and private sectors

The Basics, Third Edition

Establishing and Managing a Successful Facility

WarDriving and Wireless Penetration Testing

Advances in Digital Forensics IV

Advances in Digital Forensics V

Learn to pull "digital fingerprints from alternate data storage (ADS) devices including: iPod, Xbox, digital cameras and more from the cyber sleuths who train the Secret Service, FBI, and Department of Defense in bleeding edge digital forensics techniques. This book sets a new forensic methodology standard for investigators to use. This book begins by describing how alternate data storage devices are used to both move and hide data. From here a series of case studies using bleeding edge forensic analysis tools demonstrate to readers how to perform forensic investigations on a variety of ADS devices including: Apple iPods, Digital Video Recorders, Cameras, Gaming Consoles (Xbox, PS2, and PSP), Bluetooth devices, and more using state of the art tools. Finally, the book takes a look into the future at "not yet every day devices which will soon be common repositories for hiding and moving data for both legitimate and illegitimate purposes. Authors are undisputed leaders who train the Secret Service, FBI, and Department of Defense Book presents "one of a kind" bleeding edge information that absolutely can not be found anywhere else Today the industry has exploded and cyber investigators can be found in almost every field

Though an increasing number of criminals are using computers and computer networks, few investigators are well versed in the issues related to digital evidence. This work explains how computer networks function and how they can be used in a crime.

Uncover a digital trail of e-evidence by using the helpful, easy-to-understand information in Computer Forensics For Dummies! Professional and armchair investigators alike can learn the basics of computer forensics, from digging out electronic evidence to solving the case. You won't need a computer science degree to master e-discovery. Find and filter data in mobile devices, e-mail, and other Web-based technologies. You'll learn all about e-mail and Web-based forensics, mobile forensics, passwords and encryption, and other e-evidence found through VoIP, voicemail, legacy mainframes, and databases. You'll discover how to use the latest forensic software, tools, and equipment to find the answers that you're looking for in record time. When you understand how data is stored, encrypted, and recovered, you'll be able to protect your personal privacy as well. By the time you finish reading this book, you'll know how to: Prepare for and conduct computer forensics investigations Find and filter data Protect personal privacy Transfer evidence without contaminating it Anticipate legal loopholes and opponents' methods Handle passwords and encrypted data Work with the courts and win the case Plus, Computer Forensics for Dummies includes lists of things that everyone interested in computer forensics should know, do, and build. Discover how to get qualified for a career in computer forensics, what to do to be a great investigator and expert witness, and how to build a forensics lab or toolkit. Note: CD-ROM/DVD and other supplementary materials are not included as part of

eBook file.

The open source nature of the platform has not only established a new direction for the industry, but enables a developer or forensic analyst to understand the device at the most fundamental level. Android Forensics covers an open source mobile device platform based on the Linux 2.6 kernel and managed by the Open Handset Alliance. The Android platform is a major source of digital forensic investigation and analysis. This book provides a thorough review of the Android platform including supported hardware devices, the structure of the Android development project and implementation of core services (wireless communication, data storage and other low-level functions). Finally, it will focus on teaching readers how to apply actual forensic techniques to recover data. Ability to forensically acquire Android devices using the techniques outlined in the book Detailed information about Android applications needed for forensics investigations Important information about SQLite, a file based structured data storage relevant for both Android and many other platforms.

Techno Security's Guide to Managing Risks for IT Managers, Auditors, and Investigators

Cell Phone Forensics Tools

Critical Concepts, Standards, and Techniques in Cyber Forensics

People, Process, and Technologies to Defend the Enterprise

Thoughts on Teaching Desktop Computer and IPAD Forensics

An Overview and Analysis

This book covers the full life cycle of conducting a mobile and computer

digital forensic examination, including planning and performing an investigation as well as report writing and testifying. Case reviews in corporate, civil, and criminal situations are also described from both prosecution and defense perspectives. Digital Forensics Explained, Second Edition draws from years of experience in local, state, federal, and international environments and highlights the challenges inherent in deficient cyber security practices. Topics include the importance of following the scientific method and verification, legal and ethical issues, planning an investigation (including tools and techniques), incident response, case project management and authorization, social media and internet, cloud, anti-forensics, link and visual analysis, and psychological considerations. The book is a valuable resource for the academic environment, law enforcement, those in the legal profession, and those working in the cyber security field. Case reviews include cyber security breaches, anti-forensic challenges, child

exploitation, and social media investigations. Greg Gogolin, PhD, CISSP, is a Professor of Information Security and Intelligence at Ferris State University and a licensed Professional Investigator. He has worked more than 100 cases in criminal, civil, and corporate environments.

The mass utilization of social networking sites, social media applications, and mobile devices such as cellphones and tablets as a standard for social interaction has become a global phenomenon. These tools have caused a paradigm shift within the communications field, law enforcement agencies, and the criminal justice system. During the 1980's Congress was faced with the dawn of the computer age. There were many states which did have laws in place to adequately address crimes committed using technology. Congress chose to address federal computer-related offenses in a single, new statute, 18 U.S.C. ? 1030. Congressional concerns for problems associated with computer crime have been ongoing since enacting section 18 U.S.C. ? 1030. With the United States

new war on terrorism and the global use of technology, in 2007 Congress approved the Protect America Act and the FISA Amendments Act of 2008. The need for law enforcement agencies to exploit technology such as social networking, social media and mobile devices in a criminal prosecution is imperative. The data posted by users onto social networking sites or critical data that becomes stored onto mobile devices could be valuable to criminal prosecutions. In a time where potentially state-sponsored hackers and rouge criminals are using cyber warfare, cyber espionage, and malware to attack individuals and the United States itself, it is vital that law enforcement agencies have effective critical investigative tools that allow them to evaluate critical volumes of digital evidence. Many ongoing criminal investigations deal with evidence found on mobile devices and cellular phones of suspects, involving social networking and social media applications. Offenders are utilizing technology to access infinite volumes of personal data that is readily

available from social networking and interpersonal applications. Criminals have adopted mobile phones and other handheld devices as tools in committing criminal acts. Keywords: Professor Riddell, Cyber security, Digital Forensics, Computer Crimes, Social Networking, Social Media Artifacts, Social Media Policing.

Practically every crime now involves some aspect of digital evidence. This is the most recent volume in the Advances in Digital Forensics series. It describes original research results and innovative applications in the emerging discipline of digital forensics. In addition, it highlights some of the major technical and legal issues related to digital evidence and electronic crime investigations. This book contains a selection of twenty-eight edited papers from the Fourth Annual IFIP WG 11.9 Conference on Digital Forensics, held at Kyoto University, Kyoto, Japan in the spring of 2008.

Get started with the art and science of digital forensics with this practical, hands-on guide! About This Book

Champion the skills of digital forensics by understanding the nature of recovering and preserving digital information which is essential for legal or disciplinary proceedings Explore new and promising forensic processes and tools based on 'disruptive technology' to regain control of caseloads. Richard Boddington, with 10+ years of digital forensics, demonstrates real life scenarios with a pragmatic approach Who This Book Is For This book is for anyone who wants to get into the field of digital forensics. Prior knowledge of programming languages (any) will be of great help, but not a compulsory prerequisite. What You Will Learn Gain familiarity with a range of different digital devices and operating and application systems that store digital evidence. Appreciate and understand the function and capability of forensic processes and tools to locate and recover digital evidence. Develop an understanding of the critical importance of recovering digital evidence in pristine condition and ensuring its safe handling from seizure

to tendering it in evidence in court. Recognise the attributes of digital evidence and where it may be hidden and is often located on a range of digital devices. Understand the importance and challenge of digital evidence analysis and how it can assist investigations and court cases. Explore emerging technologies and processes that empower forensic practitioners and other stakeholders to harness digital evidence more effectively. In Detail Digital Forensics is a methodology which includes using various tools, techniques, and programming language. This book will get you started with digital forensics and then follow on to preparing investigation plan and preparing toolkit for investigation. In this book you will explore new and promising forensic processes and tools based on 'disruptive technology' that offer experienced and budding practitioners the means to regain control of their caseloads. During the course of the book, you will get to know about the technical side of digital forensics and various tools that are needed to perform digital

forensics. This book will begin with giving a quick insight into the nature of digital evidence, where it is located and how it can be recovered and forensically examined to assist investigators. This book will take you through a series of chapters that look at the nature and circumstances of digital forensic examinations and explains the processes of evidence recovery and preservation from a range of digital devices, including mobile phones, and other media. This book has a range of case studies and simulations will allow you to apply the knowledge of the theory gained to real-life situations. By the end of this book you will have gained a sound insight into digital forensics and its key components. Style and approach The book takes the reader through a series of chapters that look at the nature and circumstances of digital forensic examinations and explains the processes of evidence recovery and preservation from a range of digital devices, including mobile phones, and other media. The mystery of digital forensics is swept aside and the reader will gain

a quick insight into the nature of digital evidence, where it is located and how it can be recovered and forensically examined to assist investigators.

Android Forensics

Digital Forensics and Investigations

The Evidentary Value of Social Media in Criminal Investigations

Practical Digital Forensics

Encyclopedia of Information Ethics and Security

Cybercrime and Digital Forensics

Approximately 80 percent of the world's population now owns a cell phone, which can hold evidence or contain logs about communications concerning a crime. Cameras, PDAs, and GPS devices can also contain information related to corporate policy infractions and crimes. Aimed to prepare investigators in the public and private sectors, Digital Forensics for Handheld Devices examines both the theoretical and practical aspects of investigating handheld digital devices. This book touches on all areas of mobile device forensics, including topics from the legal, technical, academic, and social aspects of the discipline. It provides guidance on how to seize data, examine it, and prepare it as evidence for court. This includes the use of chain of custody forms for

seized evidence and Faraday Bags for digital devices to prevent further connectivity and tampering of evidence. Emphasizing the policies required in the work environment, the author provides readers with a clear understanding of the differences between a corporate investigation and a criminal investigation. The book also: Offers best practices for establishing an incident response policy and seizing data from company or privately owned digital devices Provides guidance in establishing dedicated examinations free of viruses, spyware, and connections to other devices that could taint evidence Supplies guidance on determining protocols for complicated crime scenes with external media and devices that may have connected with the handheld device Considering important privacy issues and the Fourth Amendment, this book facilitates an understanding of how to use digital forensic tools to investigate the complete range of available digital devices, including flash drives, cell phones, PDAs, digital cameras, and netbooks. It includes examples of commercially available digital forensic tools and ends with a discussion of the education and certifications required for various careers in mobile device forensics.

This new edition of Forensic Science: The Basics provides a fundamental background in forensic science as well as criminal investigation and

court testimony. It describes how various forms of data are collected, preserved, and analyzed, and also explains how expert testimony based on the analysis of forensic evidence is presented in court.The book

High Technoloty Crime Investigator's Handbook brings to light many high tech tools, advanced methods and streamlined applications that can be used to meet the investigative management challenges now and in the next century. The whole area of technological crime has become increasingly complex in today's business environment and this book responds to that reality. *Emphasizes organizational and management issues when dealing with technology investigations *Provides high tech tools, advanced methods, and applications *Employs technology, management concepts, and marketing issues to bridge the investigative process

This book discusses IPAD and desktop computer forensics and some of the tools that are used in order to identify, preserve, analyze, and report on digital evidence. It also discusses some of the academics such as language arts, mathematics, and science that should be encouraged since middle school so that future computer examiners will have an easier time with critical thinking, analysis, and report writing. This book also discusses some thoughts about the subject from students. Building a digital forensic resume is

also explored. Some technical topics such as MAC addressing, forensic imaging, IP Spoofing, reverse look ups, GPS Metadata, write blockers, and examination machines are touched up. Some paperwork and procedural items such as chain of custody, test plan, and the Frye Test are also discussed. The book is written in any easy to understand language that has something of interest for everyone.

Forensic Science

Devices, Tools, and Techniques

Fifth IFIP WG 11.9 International Conference on Digital Forensics, Orlando, Florida, USA, January 26-28, 2009, Revised Selected Papers

Forensic Science, Computers, and the Internet

First International Conference, ACC 2011, Kochi, India, July 22-24, 2011. Proceedings, Part I

Digital Forensics Processing and Procedures

Advancing technologies, especially computer technologies, have necessitated the creation of a comprehensive investigation and collection methodology for digital and online evidence. The goal of cyber forensics is to perform a structured investigation while maintaining a documented chain of evidence to find out exactly what happened on a computing device or on a network and who was responsible for it. Critical Concepts, Standards, and Techniques in Cyber Forensics is a critical research book that focuses on providing in-depth knowledge about online forensic practices and methods. Highlighting a range of topics such as data mining, digital evidence, and

fraud investigation, this book is ideal for security analysts, IT specialists, software engineers, researchers, security professionals, criminal science professionals, policymakers, academicians, and students.

Computer Forensics: Evidence Collection and Management examines cyber-crime, E-commerce, and Internet activities that could be used to exploit the Internet, computers, and electronic devices. The book focuses on the numerous vulnerabilities and threats that are inherent on the Internet and networking environments and presents techniques and suggestions for corporate security personnel, investigators, and forensic examiners to successfully identify, retrieve, and protect valuable forensic evidence for litigation and prosecution. The book is divided into two major parts for easy reference. The first part explores various crimes, laws, policies, forensic tools, and the information needed to understand the underlying concepts of computer forensic investigations. The second part presents information relating to crime scene investigations and management, disk and file structure, laboratory construction and functions, and legal testimony. Separate chapters focus on investigations involving computer systems, e-mail, and wireless devices. Presenting information patterned after technical, legal, and managerial classes held by computer forensic professionals from Cyber Crime Summits held at Kennesaw State University in 2005 and 2006, this book is an invaluable resource for those who want to be both efficient and effective when conducting an investigation.

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. Exploring the cyber security topics that every engineer should understand, the book discusses: Network security Personal data security Cloud computing Mobile computing Preparing for an incident Incident response Evidence handling Internet usage Law and compliance Security and 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 area 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.

This volume is the first part of a four-volume set (CCIS 190, CCIS 191, CCIS 192, CCIS 193), which constitutes the refereed proceedings of the First International Conference on Computing and Communications, ACC 2011, held in Kochi, India, in July 2011. The 68 revised full papers presented in this volume were carefully reviewed and selected from a large number of

submissions. The papers are organized in topical sections on ad hoc networks; advanced micro architecture techniques; autonomic and context-aware computing; bioinformatics and bio-computing; cloud, cluster, grid and P2P computing; cognitive radio and cognitive networks; cyber forensics; database and information systems.

Digital Forensics for Handheld Devices

Digital Forensics and Cyber Crime

Computer Forensics For Dummies

Cyber Security and Digital Forensics

Advanced Smart Computing Technologies in Cybersecurity and Forensics

Investigation, Analysis and Mobile Security for Google Android

Rapid technological advancement has given rise to new ethical dilemmas and security threats, while the development of appropriate ethical codes and security measures fail to keep pace, which makes the education of computer users and professionals crucial. The Encyclopedia of Information Ethics and Security is an original, comprehensive reference source on ethical and security issues relating to the latest technologies. Covering a wide range of themes, this valuable reference tool includes topics such as computer crime, information warfare, privacy, surveillance, intellectual property and education. This encyclopedia is a useful tool for students, academics, and professionals.

The First International Conference on Digital Forensics and Cyber Crime (ICDF2C) was held in Albany from September 30 to October 2, 2009. The field of digital for- sics is growing rapidly with implications for several fields including law enforcement, network security, disaster recovery and

accounting. This is a multidisciplinary area that requires expertise in several areas including, law, computer science, finance, networking, data mining, and criminal justice. This conference brought together pr- titioners and researchers from diverse fields providing opportunities for business and intellectual engagement among attendees. All the conference sessions were very well attended with vigorous discussions and strong audience interest. The conference featured an excellent program comprising high-quality paper pr- entations and invited speakers from all around the world. The first day featured a plenary session including George Philip, President of University at Albany, Harry Corbit, Suprintendent of New York State Police, and William Pelgrin, Director of New York State Office of Cyber Security and Critical Infrastructure Coordination. An outstanding keynote was provided by Miklos Vasarhelyi on continuous auditing. This was followed by two parallel sessions on accounting fraud /financial crime, and m- timedia and handheld forensics. The second day of the conference featured a mesm- izing keynote talk by Nitesh Dhanjani from Ernst and Young that focused on psyc- logical profiling based on open source intelligence from social network analysis. The third day of the conference featured both basic and advanced tutorials on open source forensics. "This book contains some of the most up-to-date information available anywhere on a wide variety of topics related to Techno Security. As you read the book, you will notice that the authors took the approach of identifying some of the risks, threats, and vulnerabilities and then discussing the countermeasures to address them. Some of the topics and thoughts discussed here are as new as tomorrow's headlines, whereas others have been around for decades without being properly addressed. I hope you enjoy this book as much as we have enjoyed working with the various authors and friends during its development. "Donald Withers,

CEO and Cofounder of TheTrainingCo. ▯ Jack Wiles, on Social Engineering offers up a potpourri of tips, tricks, vulnerabilities, and lessons learned from 30-plus years of experience in the worlds of both physical and technical security. ▯ Russ Rogers on the Basics of Penetration Testing illustrates the standard methodology for penetration testing: information gathering, network enumeration, vulnerability identification, vulnerability exploitation, privilege escalation, expansion of reach, future access, and information compromise. ▯ Johnny Long on No Tech Hacking shows how to hack without touching a computer using tailgating, lock bumping, shoulder surfing, and dumpster diving. ▯ Phil Drake on Personal, Workforce, and Family Preparedness covers the basics of creating a plan for you and your family, identifying and obtaining the supplies you will need in an emergency. ▯ Kevin O▯Shea on Seizure of Digital Information discusses collecting hardware and information from the scene. ▯ Amber Schroader on Cell Phone Forensics writes on new methods and guidelines for digital forensics. ▯ Dennis O▯Brien on RFID: An Introduction, Security Issues, and Concerns discusses how this well-intended technology has been eroded and used for fringe implementations. ▯ Ron Green on Open Source Intelligence details how a good Open Source Intelligence program can help you create leverage in negotiations, enable smart decisions regarding the selection of goods and services, and help avoid pitfalls and hazards. ▯ Raymond Blackwood on Wireless Awareness: Increasing the Sophistication of Wireless Users maintains it is the technologist▯s responsibility to educate, communicate, and support users despite their lack of interest in understanding how it works. ▯ Greg Kipper on What is Steganography? provides a solid understanding of the basics of steganography, what it can and can▯t do, and arms you with the information you need to set your career path. ▯ Eric Cole

on Insider Threat discusses why the insider threat is worse than the external threat and the effects of insider threats on a company. Internationally known experts in information security share their wisdom Free pass to Techno Security Conference for everyone who purchases a book□$1,200 value
The book is an easy-to-follow guide with clear instructions on various mobile forensic techniques. The chapters and the topics within are structured for a smooth learning curve, which will swiftly empower you to master mobile forensics. If you are a budding forensic analyst, consultant, engineer, or a forensic professional wanting to expand your skillset, this is the book for you. The book will also be beneficial to those with an interest in mobile forensics or wanting to find data lost on mobile devices. It will be helpful to be familiar with forensics in general but no prior experience is required to follow this book.
Secrets & Solutions
Investigative Uses of Technology
Guidelines on Cell Phone Forensics
Computer Forensics: Investigation Procedures and Response (CHFI)
Evidence Collection and Management
First International ICST Conference, ICDF2C 2009, Albany, Ny, USA, September 30 - October 2, 2009, Revised Selected Papers
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.

Master the skills you need to conduct a successful digital investigation with Nelson/Phillips/Steuart's GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS, Sixth Edition--the most comprehensive forensics resource available. While other books offer just an overview of the field, this hands-on learning text provides clear instruction on the tools and techniques of the trade, walking you through every step of the computer forensics investigation--from lab setup to testifying in court. It also explains how to use current forensics software and provides free demo downloads. It includes the most up-to-date coverage available of Linux and Macintosh,

virtual machine software such as VMware and Virtual Box, Android, mobile devices, handheld devices, cloud forensics, email, social media and the Internet of Anything. With its practical applications, you can immediately put what you learn into practice.
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.
Guide to Computer Forensics and Investigations
Alternate Data Storage Forensics