Computer Forensics Cyber Crime Introduction

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

Written by experts on the frontlines, Investigating Internet Crimes provides seasoned and new investigators with the background and tools they need to investigate crime occurring in the online world. This invaluable guide provides step-by-step instructions for investigating Internet crimes, including locating, interpreting,

understanding, collecting, and documenting online electronic evidence to benefit investigations. Cybercrime is the fastest growing area of crime as more criminals seek to exploit the speed, convenience and anonymity that the Internet provides to commit a diverse range of criminal activities. Today's online crime includes attacks against computer data and systems, identity theft, distribution of child pornography, penetration of online financial services, using social networks to commit crimes, and the deployment of viruses, botnets, and email scams such as phishing.

Symantec's 2012 Norton Cybercrime Report stated that the world spent an estimated $110 billion to combat cybercrime, an average of nearly $200 per victim. Law enforcement agencies and corporate security officers around the world with the responsibility for enforcing, investigating and prosecuting cybercrime are overwhelmed, not only by the sheer number of crimes being committed but by a lack of adequate training material. This book provides that fundamental knowledge, including how to properly collect and document online evidence, trace IP addresses, and work undercover. Provides step-by-step

instructions on how to investigate crimes online Covers how new software tools can assist in online investigations Discusses how to track down, interpret, and understand online electronic evidence to benefit investigations Details guidelines for collecting and documenting online evidence that can be presented in court
Cybercrime Case Presentation is a "first look" excerpt from Brett Shavers' new Syngress book, Placing the Suspect Behind the Keyboard. Case presentation requires the skills of a good forensic examiner and great public speaker in order to convey enough

information to an audience for the audience to place the suspect behind the keyboard. Using a variety of visual aids, demonstrative methods, and analogies, investigators can effectively create an environment where the audience fully understands complex technical information and activity in a chronological fashion, as if they observed the case as it happened.

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 Security and Digital Forensics

An Introduction, Instructor's ManualWith Test Item File

Cyber Crime and Cyber Terrorism

Investigator's Handbook

Cybercrime and the Law
A Comprehensive Resource for Everyone
Learn Computer Forensics

Explaining cybercrime in a highly networked world, this book provides a comprehensive yet accessible summary of the history, modern developments, and efforts to combat cybercrime in various forms at all levels of government—international, national, state, and local. • Provides accessible, comprehensive coverage of a complex topic that encompasses identity theft to copyright infringement written for

non-technical readers • Pays due attention to important elements of cybercrime that have been largely ignored in the field, especially politics • Supplies examinations of both the domestic and international efforts to combat cybercrime • Serves an ideal text for first-year undergraduate students in criminal justice programs

The Handbook of Digital Forensics and Investigation builds on the success of the Handbook of Computer Crime Investigation, bringing together renowned experts in all areas of digital forensics and investigation

to provide the consummate resource for practitioners in the field. It is also designed as an accompanying text to Digital Evidence and Computer Crime, now in its third edition, providing advanced material from specialists in each area of Digital Forensics. This unique collection details how to conduct digital investigations in both criminal and civil contexts, and how to locate and utilize digital evidence on computers, networks, and embedded systems. Specifically, the Investigative Methodology section of the Handbook

provides expert guidance in the three main areas of practice: Forensic Analysis, Electronic Discovery and Intrusion Investigation. The Technology section is extended and updated to reflect the state of the art in each area of specialization. The main areas of focus in the Technology section are forensic analysis of Windows, Unix, Macintosh, and embedded systems (including cellular telephones and other mobile devices), and investigations involving networks (including enterprise environments and mobile

telecommunications technology). The Handbook of Digital Forensics and Investigation is an essential technical reference and on-the-job guide that IT professionals, forensic practitioners, law enforcement, and attorneys will rely on when confronted with computer related crime and digital evidence of any kind. *Provides methodologies proven in practice for conducting digital investigations of all kinds *Demonstrates how to locate and interpret a wide variety of digital evidence, and how it can be useful in investigations

Presents tools in the context of the investigative process, including EnCase, FTK, ProDiscover, foremost, XACT, Network Miner, Splunk, flow-tools, and many other specialized utilities and analysis platforms
Case examples in every chapter give readers a practical understanding of the technical, logistical, and legal challenges that arise in real investigations
The first full-scale overview of cybercrime, law, and policy
Through the rise of big data and the internet of things, terrorist organizations

have been freed from geographic and logistical confines and now have more power than ever before to strike the average citizen directly at home. This, coupled with the inherently asymmetrical nature of cyberwarfare, which grants great advantage to the attacker, has created an unprecedented national security risk that both governments and their citizens are woefully ill-prepared to face. Examining cyber warfare and terrorism through a critical and academic perspective can lead to a better understanding of its foundations

and implications. Cyber Warfare and Terrorism: Concepts, Methodologies, Tools, and Applications is an essential reference for the latest research on the utilization of online tools by terrorist organizations to communicate with and recruit potential extremists and examines effective countermeasures employed by law enforcement agencies to defend against such threats. Highlighting a range of topics such as cyber threats, digital intelligence, and counterterrorism, this multi-volume book is ideally designed for law

enforcement, government officials, lawmakers, security analysts, IT specialists, software developers, intelligence and security practitioners, students, educators, and researchers.

Fifth International Conference, ICDF2C 2013, Moscow, Russia, September 26-27, 2013, Revised Selected Papers

Cybercrime and Digital Forensics

Computer Forensics

Searching and Seizing Computers and Obtaining Electronic Evidence in Criminal Investigations

A Field Manual for Collecting, Examining, and Preserving Evidence of Computer Crimes, Second Edition
Forensic Science, Computers and the Internet

Following on the success of his introductory text, Digital Evidence and Computer Crime, Eoghan Casey brings together a few top experts to create the first detailed guide for professionals who are already familiar with digital evidence. The Handbook of Computer Crime Investigation helps readers master the forensic analysis of computer systems with a three-part approach covering tools, technology, and case studies. The Tools section provides the

details on leading software programs, with each chapter written by that product's creator. The section ends with an objective comparison of the strengths and limitations of each tool. The main Technology section provides the technical "how to" information for collecting and analyzing digital evidence in common situations, starting with computers, moving on to networks, and culminating with embedded systems. The Case Examples section gives readers a sense of the technical, legal, and practical challenges that arise in real computer investigations. The Tools section provides details of leading hardware and software The main Technology section provides the technical "how to" information for collecting and analysing digital evidence in common situations Case Examples give

readers a sense of the technical, legal, and practical challenges that arise in real computer investigations Updated to include the most current events and information on cyberterrorism, the second edition of Computer Forensics: Cybercriminals, Laws, and Evidence continues to balance technicality and legal analysis as it enters into the world of cybercrime by exploring what it is, how it is investigated, and the regulatory laws around the collection and use of electronic evidence. Students are introduced to the technology involved in computer forensic investigations and the technical and legal difficulties involved in searching, extracting, maintaining, and storing electronic evidence, while simultaneously looking at the legal implications of such investigations and the rules of legal procedure relevant

to electronic evidence. Significant and current computer forensic developments are examined, as well as the implications for a variety of fields including computer science, security, criminology, law, public policy, and administration.

The purpose of law is to prevent the society from harm by declaring what conduct is criminal, and prescribing the punishment to be imposed for such conduct. The pervasiveness of the internet and its anonymous nature make cyberspace a lawless frontier where anarchy prevails. Historically, economic value has been assigned to visible and tangible assets. With the increasing appreciation that intangible data disseminated through an intangible medium can possess economic value, cybercrime is also

being recognized as an economic asset. The Cybercrime, Digital Forensics and Jurisdiction disseminate knowledge for everyone involved with understanding and preventing cybercrime - business entities, private citizens, and government agencies. The book is firmly rooted in the law demonstrating that a viable strategy to confront cybercrime must be international in scope.

"This book is a must for anyone attempting to examine the iPhone. The level of forensic detail is excellent. If only all guides to forensics were written with this clarity!"-Andrew Sheldon, Director of Evidence Talks, computer forensics experts With iPhone use increasing in business networks, IT and security professionals face a serious challenge: these devices store an enormous amount of information. If your

staff conducts business with an iPhone, you need to know how to recover, analyze, and securely destroy sensitive data. iPhone Forensics supplies the knowledge necessary to conduct complete and highly specialized forensic analysis of the iPhone, iPhone 3G, and iPod Touch. This book helps you: Determine what type of data is stored on the device Break v1.x and v2.x passcode-protected iPhones to gain access to the device Build a custom recovery toolkit for the iPhone Interrupt iPhone 3G's "secure wipe" process Conduct data recovery of a v1.x and v2.x iPhone user disk partition, and preserve and recover the entire raw user disk partition Recover deleted voicemail, images, email, and other personal data, using data carving techniques Recover geotagged metadata from camera photos Discover Google

map lookups, typing cache, and other data stored on the live file system Extract contact information from the iPhone's database Use different recovery strategies based on case needs And more. iPhone Forensics includes techniques used by more than 200 law enforcement agencies worldwide, and is a must-have for any corporate compliance and disaster recovery plan.

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

The Best Damn Cybercrime and Digital Forensics Book Period

Concepts, Methodologies, Tools, and Applications

The Basics of Digital Forensics

Digital Forensics
An Introduction

Product Description: Completely updated in a new edition, this book fully defines computer-related crime and the legal issues involved in its investigation. Re-organized with different chapter headings for better understanding of the subject, it provides a framework for the development of a computer crime unit. Updated with new information on technology, this book is the only comprehensive examination of computer-related crime and its investigation on the market. It includes an exhaustive discussion of legal and social issues, fully defines computer

crime, and provides specific examples of criminal activities involving computers, while discussing the phenomenon in the context of the criminal justice system. Computer Forensics and Cyber Crime 2e provides a comprehensive analysis of current case law, constitutional challenges, and government legislation. New to this edition is a chapter on Organized Crime & Terrorism and how it relates to computer related crime as well as more comprehensive information on Processing Evidence and Report Preparation. For computer crime investigators, police chiefs, sheriffs, district attorneys, public defenders, and defense attorneys.

"Computer Forensics and Cyber Crime: An Introduction" explores the current state of computer crime within the United States. Beginning with the 1970's, this work traces the history of technological crime, and identifies areas ripe for exploitation from technology savvy deviants. This book also evaluates forensic practices and software in light of government legislation, while providing a thorough analysis of emerging case law in a jurisprudential climate. Finally, this book outlines comprehensive guidelines for the development of computer forensic laboratories, the creation of computer crime task forces, and search and

seizures of electronic equipment.
The leading introduction to computer crime and forensicsis now fully updated to reflect today's newest attacks, laws, and investigatory best practices. Packed with new case studies, examples, and statistics, Computer Forensics and Cyber Crime, Third Edition adds up-to-the-minute coverage of smartphones, cloud computing, GPS, Mac OS X, Linux, Stuxnet, cyberbullying, cyberterrorism, search and seizure, online gambling, and much more. Covers all forms of modern and traditional computer crime, defines all relevant terms, and explains all technical and legal concepts in plain

English, so students can succeed even if they have no technical, legal, or investigatory background.

Get up and running with collecting evidence using forensics best practices to present your findings in judicial or administrative proceedings Key Features Learn the core techniques of computer forensics to acquire and secure digital evidence skillfully Conduct a digital forensic examination and document the digital evidence collected Analyze security systems and overcome complex challenges with a variety of forensic investigations Book Description A computer forensics investigator

must possess a variety of skills, including the ability to answer legal questions, gather and document evidence, and prepare for an investigation. This book will help you get up and running with using digital forensic tools and techniques to investigate cybercrimes successfully. Starting with an overview of forensics and all the open source and commercial tools needed to get the job done, you'll learn core forensic practices for searching databases and analyzing data over networks, personal devices, and web applications. You'll then learn how to acquire valuable information from different places, such as filesystems, e-

mails, browser histories, and search queries, and capture data remotely. As you advance, this book will guide you through implementing forensic techniques on multiple platforms, such as Windows, Linux, and macOS, to demonstrate how to recover valuable information as evidence. Finally, you'll get to grips with presenting your findings efficiently in judicial or administrative proceedings. By the end of this book, you'll have developed a clear understanding of how to acquire, analyze, and present digital evidence like a proficient computer forensics investigator. What you will learn Understand investigative processes, the

rules of evidence, and ethical guidelines Recognize and document different types of computer hardware Understand the boot process covering BIOS, UEFI, and the boot sequence Validate forensic hardware and software Discover the locations of common Windows artifacts Document your findings using technically correct terminology Who this book is for If you're an IT beginner, student, or an investigator in the public or private sector this book is for you.This book will also help professionals and investigators who are new to incident response and digital forensics and interested in making a career in the

cybersecurity domain.
Forensic Computer Crime Investigation
Introduction to Cybercrime: Computer Crimes, Laws, and Policing in the 21st Century
Recovering Evidence, Personal Data, and Corporate Assets

Challenges and Future Trends
Computer Forensics and Cyber Crime: An Introduction, 2/e
"Digital Evidence and Computer Crime" provides the knowledge necessary to uncover and use digital evidence effectively in any kind of investigation. This completely updated

edition provides the introductory materials that new students require, and also expands on the material presented in previous editions to help students develop these skills.

This edited book, Introduction to Cyber Forensic Psychology: Understanding the Mind of the Cyber Deviant Perpetrators, is the first of its kind in Singapore, which explores emerging cybercrimes and cyber enabled crimes.Utilising a forensic psychology perspective to examine the mind of the cyber deviant perpetrators as well as strategies for assessment, prevention, and interventions, this book seeks to tap on the valuable experiences and knowledge of leading

forensic psychologists and behavioural scientists in Singapore.Some of the interesting trends discussed in this book include digital self-harm, stalkerware usage, livestreaming of crimes, online expression of hate and rebellion, attacks via smart devices, COVID-19 related scams and cyber vigilantism. Such insights would enhance our awareness about growing pervasiveness of cyber threats and showcase how behavioural sciences is a force-multiplier in complementing the existing technological solutions.

Since the last edition of this book was written more than a decade ago, cybercrime has

evolved. Motives have not changed, but new means and opportunities have arisen with the advancement of the digital age. Investigating Computer-Related Crime: Second Edition incorporates the results of research and practice in a variety of venues, growth in the field, and new technology to offer a fresh look at the topic of digital investigation. Following an introduction to cybercrime and its impact on society, this book examines: Malware and the important differences between targeted attacks and general attacks The framework for conducting a digital investigation, how it is conducted, and some of the key issues that arise

over the course of an investigation How the computer forensic process fits into an investigation The concept of system glitches vs. cybercrime and the importance of weeding out incidents that don't need investigating Investigative politics that occur during the course of an investigation, whether to involve law enforcement, and when an investigation should be stopped How to prepare for cybercrime before it happens End-to-end digital investigation Evidence collection, preservation, management, and effective use How to critique your investigation and maximize lessons learned This edition reflects a heightened focus on

cyber stalking and cybercrime scene assessment, updates the tools used by digital forensic examiners, and places increased emphases on following the cyber trail and the concept of end-to-end digital investigation. Discussion questions at the end of each chapter are designed to stimulate further debate into this fascinating field.

Cybercrime continues to skyrocket but we are not combatting it effectively yet. We need more cybercrime investigators from all backgrounds and working in every sector to conduct effective investigations. This book is a comprehensive resource for everyone who encounters and

investigates cybercrime, no matter their title, including those working on behalf of law enforcement, private organizations, regulatory agencies, or individual victims. It provides helpful background material about cybercrime's technological and legal underpinnings, plus in-depth detail about the legal and practical aspects of conducting cybercrime investigations. Key features of this book include: Understanding cybercrime, computers, forensics, and cybersecurity Law for the cybercrime investigator, including cybercrime offenses; cyber evidence-gathering; criminal, private and regulatory law, and nation-state

implications Cybercrime investigation from three key perspectives: law enforcement, private sector, and regulatory Financial investigation Identification (attribution) of cyber-conduct Apprehension Litigation in the criminal and civil arenas. This far-reaching book is an essential reference for prosecutors and law enforcement officers, agents and analysts; as well as for private sector lawyers, consultants, information security professionals, digital forensic examiners, and more. It also functions as an excellent course book for educators and trainers. We need more investigators who know how to fight cybercrime, and this book was

written to achieve that goal. Authored by two former cybercrime prosecutors with a diverse array of expertise in criminal justice and the private sector, this book is informative, practical, and readable, with innovative methods and fascinating anecdotes throughout.

Cyber Victimology

Introduction To Cyber Forensic Psychology: Understanding The Mind Of The Cyber Deviant Perpetrators

Cyber Forensics

Handbook of Digital Forensics and Investigation

Challenges, Issues, and Outcomes

Investigating Internet Crimes

Placing the Suspect Behind the Keyboard is the definitive book on conducting a complete investigation of a cybercrime using digital forensics techniques as well as physical investigative procedures. This book merges a digital analysis examiner's work with the work of a case investigator in order to build a solid case to identify and prosecute cybercriminals. Brett Shavers links traditional investigative techniques with high tech crime

analysis in a manner that not only determines elements of crimes, but also places the suspect at the keyboard. This book is a first in combining investigative strategies of digital forensics analysis processes alongside physical investigative techniques in which the reader will gain a holistic approach to their current and future cybercrime investigations. Learn the tools and investigative principles of both physical and digital cybercrime

investigations—and how they fit together to build a solid and complete case Master the techniques of conducting a holistic investigation that combines both digital and physical evidence to track down the "suspect behind the keyboard" The only book to combine physical and digital investigative techniques

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.

Computer Forensics and Cyber CrimeAn IntroductionPrentice Hall

"Cybercrime and cyber-terrorism represent a serious challenge to society as a whole." - Hans Christian

Krüger, Deputy Secretary General of the Council of Europe Crime has been with us as long as laws have existed, and modern technology has given us a new type of criminal activity: cybercrime. Computer and network related crime is a problem that spans the globe, and unites those in two disparate fields: law enforcement and information technology. This book will help both IT pros and law enforcement specialists understand both their own roles and

those of the other, and show why that understanding and an organized, cooperative effort is necessary to win the fight against this new type of crime. 62% of US companies reported computer-related security breaches resulting in damages of $124 million dollars. This data is an indication of the massive need for Cybercrime training within the IT and law enforcement communities. The only book that covers Cybercrime from forensic

investigation through prosecution. Cybercrime is one of the battlefields in the war against terror.
Investigating Computer-Related Crime, Second Edition
Computer Forensics and Cyber Crime
Scene of the Cybercrime: Computer Forensics Handbook
Digital Forensics and Cyber Crime
Using Digital Forensics and Investigative Techniques to Identify Cybercrime Suspects

Cyber Warfare and Terrorism: Concepts, Methodologies, Tools, and Applications

The Digital Age offers many far-reaching opportunities - opportunities that allow for fast global communications, efficient business transactions and stealthily executed cyber crimes. Featuring contributions from digital forensic experts, the editor of Forensic Computer Crime Investigation presents a vital resource that outlines the latest strategi 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.

Cybercrime and Information Technology: Theory and Practice—The Computer Network Infostructure and Computer Security, Cybersecurity Laws, Internet of Things (IoT), and Mobile Devices is an introductory text addressing

current technology, trends, and security issues. While many books on the market cover investigations, forensic recovery, and presentation of evidence, and others explain computer and network security, this book explores both, explaining the essential principles governing computers, wireless and mobile devices, the Internet of Things, cloud systems, and their significant vulnerabilities. Only with this knowledge can students truly appreciate the security challenges and opportunities for cybercrime that cannot be uncovered, investigated, and adjudicated unless they are understood. The legal portion of the book is an overview of the legal system in the United States, including cyberlaw standards, and regulations affecting cybercrime. This section includes

cases in progress that are shaping and developing legal precedents. As is often the case, new technologies require new statues and regulations—something the law is often slow to move on given the current speed in which technology advances. Key Features: Provides a strong foundation of cybercrime knowledge along with the core concepts of networking, computer security, Internet of Things (IoTs), and mobile devices. Addresses legal statutes and precedents fundamental to understanding investigative and forensic issues relative to evidence collection and preservation. Identifies the new security challenges of emerging technologies including mobile devices, cloud computing, Software-as-a-Service (SaaS), VMware, and the Internet of

Things. Strengthens student understanding of the fundamentals of computer and network security, concepts that are often glossed over in many textbooks, and includes the study of cybercrime as critical forward-looking cybersecurity challenges. Cybercrime and Information Technology is a welcome addition to the literature, particularly for those professors seeking a more hands-on, forward-looking approach to technology and trends. Coverage is applicable to all forensic science courses in computer science and forensic programs, particularly those housed in criminal justice departments emphasizing digital evidence and investigation processes. The textbook is appropriate for courses in the Computer Forensics and

Criminal Justice curriculum, and is relevant to those studying Security Administration, Public Administrations, Police Studies, Business Administration, Computer Science, and Information Systems. An Instructor's Manual with Test Bank and chapter PowerPoint slides is available to qualified professors for use in classroom instruction.

Presented from a criminal justice perspective, Cyberspace, Cybersecurity, and Cybercrime introduces students to the interdisciplinary field of cybercrime by exploring the theoretical, practical, and legal framework it operates under, along with strategies to combat it. Authors Janine Kremling and Amanda M. Sharp Parker provide a straightforward overview of cybercrime, cyberthreats, and the vulnerabilities

individuals, businesses, and governments face everyday in a digital environment. Highlighting the latest empirical research findings and challenges that cybercrime and cybersecurity pose for those working in the field of criminal justice, this book exposes critical issues related to privacy, terrorism, hacktivism, the dark web, and much more. Focusing on the past, present, and future impact of cybercrime and cybersecurity, it details how criminal justice professionals can be prepared to confront the changing nature of cybercrime.

IPhone Forensics

A beginner's guide to searching, analyzing, and securing digital evidence

Cybercrime Investigations
Placing the Suspect Behind the Keyboard
Internet Forensics
An Excerpt from Placing The Suspect Behind The Keyboard
The Basics of Digital Forensics provides a foundation for people new to the digital forensics field. This book teaches you how to conduct examinations by discussing what digital forensics is, the methodologies used, key technical concepts and the tools needed to perform examinations. Details on digital forensics for computers, networks, cell phones, GPS, the cloud, and Internet are discussed.

Also learn how to collect evidence, document the scene, and how deleted data is recovered. Learn all about what Digital Forensics entails Build a toolkit and prepare an investigative plan Understand the common artifacts to look for during an exam
Cyber Crime and Cyber Terrorism Investigator's Handbook is a vital tool in the arsenal of today's computer programmers, students, and investigators. As computer networks become ubiquitous throughout the world, cyber crime, cyber terrorism, and cyber war have become some of the most concerning topics in today's security landscape.

News stories about Stuxnet and PRISM have brought these activities into the public eye, and serve to show just how effective, controversial, and worrying these tactics can become. Cyber Crime and Cyber Terrorism Investigator's Handbook describes and analyzes many of the motivations, tools, and tactics behind cyber attacks and the defenses against them. With this book, you will learn about the technological and logistic framework of cyber crime, as well as the social and legal backgrounds of its prosecution and investigation. Whether you are a law enforcement professional, an IT specialist, a

researcher, or a student, you will find valuable insight into the world of cyber crime and cyber warfare. Edited by experts in computer security, cyber investigations, and counter-terrorism, and with contributions from computer researchers, legal experts, and law enforcement professionals, Cyber Crime and Cyber Terrorism Investigator's Handbook will serve as your best reference to the modern world of cyber crime. Written by experts in cyber crime, digital investigations, and counter-terrorism Learn the motivations, tools, and tactics used by cyber-attackers, computer security professionals, and

investigators Keep up to date on current national and international law regarding cyber crime and cyber terrorism See just how significant cyber crime has become, and how important cyber law enforcement is in the modern world

This innovative text provides an excellent introduction to technology-assisted crime and the basics of investigating such crime, from the criminal justice perspective. It presents clear, concise explanations for students and professionals, who need not be technically proficient to find the material easy-to-understand and practical. The book begins

by identifying and defining the most prevalent and emerging high-technology crimes and exploring their history, their original methods of commission, and their current methods of commission. Then it delineates the requisite procedural issues associated with investigating technology-assisted crime. In addition, the text provides a basic introduction to computer forensics, explores legal issues in the admission of digital evidence, and then examines the future of high-technology crime, including legal responses.

This book presents a comprehensive study of

different tools and techniques available to perform network forensics. Also, various aspects of network forensics are reviewed as well as related technologies and their limitations. This helps security practitioners and researchers in better understanding of the problem, current solution space, and future research scope to detect and investigate various network intrusions against such attacks efficiently. Forensic computing is rapidly gaining importance since the amount of crime involving digital systems is steadily increasing. Furthermore, the area is still underdeveloped and poses many technical and legal

challenges. The rapid development of the Internet over the past decade appeared to have facilitated an increase in the incidents of online attacks. There are many reasons which are motivating the attackers to be fearless in carrying out the attacks. For example, the speed with which an attack can be carried out, the anonymity provided by the medium, nature of medium where digital information is stolen without actually removing it, increased availability of potential victims and the global impact of the attacks are some of the aspects. Forensic analysis is performed at two different levels: Computer

Forensics and Network Forensics. Computer forensics deals with the collection and analysis of data from computer systems, networks, communication streams and storage media in a manner admissible in a court of law. Network forensics deals with the capture, recording or analysis of network events in order to discover evidential information about the source of security attacks in a court of law. Network forensics is not another term for network security. It is an extended phase of network security as the data for forensic analysis are collected from security products like

firewalls and intrusion detection systems. The results of this data analysis are utilized for investigating the attacks. Network forensics generally refers to the collection and analysis of network data such as network traffic, firewall logs, IDS logs, etc. Technically, it is a member of the already-existing and expanding the field of digital forensics. Analogously, network forensics is defined as "The use of scientifically proved techniques to collect, fuses, identifies, examine, correlate, analyze, and document digital evidence from multiple, actively processing and transmitting digital sources for the

purpose of uncovering facts related to the planned intent, or measured success of unauthorized activities meant to disrupt, corrupt, and or compromise system components as well as providing information to assist in response to or recovery from these activities." Network forensics plays a significant role in the security of today's organizations. On the one hand, it helps to learn the details of external attacks ensuring similar future attacks are thwarted. Additionally, network forensics is essential for investigating insiders' abuses that constitute the second costliest type of attack within

organizations. Finally, law enforcement requires network forensics for crimes in which a computer or digital system is either being the target of a crime or being used as a tool in carrying a crime. Network security protects the system against attack while network forensics focuses on recording evidence of the attack. Network security products are generalized and look for possible harmful behaviors. This monitoring is a continuous process and is performed all through the day. However, network forensics involves post mortem investigation of the attack and is initiated after crime notification. There

are many tools which assist in capturing data transferred over the networks so that an attack or the malicious intent of the intrusions may be investigated. Similarly, various network forensic frameworks are proposed in the literature.

Computer Crimes, Laws, and Policing in the 21st Century

Scene of the Cybercrime

Investigating High-Technology Computer Crime

Cyberspace, Cybersecurity, and Cybercrime

Cyber Crime: Cyber Crime: An Introduction; CH:2 Basics of Computer andCyber Forensic Crime; CH:3

Cyber Crimes and Legal Framework; CH:4 Data and Evidence Recovery; CH:5 Cyber Crimes and Cyber Laws; CH:6 Cyber Forensics Investigation; Bibliography; Index

Decoding Cyber-Crime Victimisation

Electronic discovery refers to a process in which electronic data is sought, located, secured, and searched with the intent of using it as evidence in a legal case. Computer forensics is the application of computer investigation and analysis techniques to perform an investigation to find out exactly

what happened on a computer and who was responsible. IDC estimates that the U.S. market for computer forensics will be grow from $252 million in 2004 to $630 million by 2009. Business is strong outside the United States, as well. By 2011, the estimated international market will be $1.8 billion dollars. The Techno Forensics Conference has increased in size by almost 50% in its second year; another example of the rapid growth in the market. This book is the first to combine cybercrime and digital forensic

topics to provides law enforcement and IT security professionals with the information needed to manage a digital investigation. Everything needed for analyzing forensic data and recovering digital evidence can be found in one place, including instructions for building a digital forensics lab. * Digital investigation and forensics is a growing industry * Corporate I.T. departments investigating corporate espionage and criminal activities are learning as they go and need a comprehensive guide to e-discovery *

Appeals to law enforcement agencies with limited budgets

This book constitutes the thoroughly refereed post-conference proceedings of the 5th International ICST Conference on Digital Forensics and Cyber Crime, ICDF2C 2013, held in September 2013 in Moscow, Russia. The 16 revised full papers presented together with 2 extended abstracts and 1 poster paper were carefully reviewed and selected from 38 submissions. The papers cover diverse topics in the field of digital forensics and

cybercrime, ranging from regulation of social networks to file carving, as well as technical issues, information warfare, cyber terrorism, critical infrastructure protection, standards, certification, accreditation, automation and digital forensics in the cloud.

Because it's so large and unregulated, the Internet is a fertile breeding ground for all kinds of scams and schemes. Usually it's your credit card number they're after, and they won't stop there. Not just mere annoyances, these scams are real crimes, with real

victims. Now, thanks to Internet Forensics from O'Reilly, there's something you can do about it. This practical guide to defending against Internet fraud gives you the skills you need to uncover the origins of the spammers, con artists, and identity thieves that plague the Internet. Targeted primarily at the developer community, Internet Forensics shows you how to extract the information that lies hidden in every email message, web page, and web server on the Internet. It describes the lengths the bad guys will go to

cover their tracks, and offers tricks that you can use to see through their disguises. You'll also gain an understanding for how the Internet functions, and how spammers use these protocols to their devious advantage. The book is organized around the core technologies of the Internet-email, web sites, servers, and browsers. Chapters describe how these are used and abused and show you how information hidden in each of them can be revealed. Short examples illustrate all the major techniques that are discussed. The

ethical and legal issues that arise in the uncovering of Internet abuse are also addressed. Not surprisingly, the audience for Internet Forensics is boundless. For developers, it's a serious foray into the world of Internet security; for weekend surfers fed up with spam, it's an entertaining and fun guide that lets them play amateur detective from the safe confines of their home or office. Designed as an introduction and overview to the field, Cyber Forensics: A Field Manual for Collecting, Examining, and Preserving

Evidence of Computer Crimes, Second Edition integrates theory and practice to present the policies, procedures, methodologies, and legal ramifications and implications of a cyber forensic investigation. The authors guide you step-by-step through the basics of investigation and introduce the tools and procedures required to legally seize and forensically evaluate a suspect machine. Updating and expanding information on concealment techniques, new technologies, hardware, software, and relevant new

legislation, this second edition delineates the scope and goals of cyber forensics to reveal and track legal and illegal activity. Beginning with an introduction and definition of cyber forensics, chapters explain the rules of evidence and chain of custody in maintaining legally valid electronic evidence. They describe how to begin an investigation and employ investigative methodology, as well as establish standard operating procedures for the field and cyber forensic laboratory. The authors provide an in depth examination of

the manipulation of technology to conceal illegal activities and the use of cyber forensics to uncover them. They discuss topics and issues such as conducting a cyber forensic investigation within both the local and federal legal framework, and evaluating the current data security and integrity exposure of multifunctional devices. Cyber Forensics includes details and tips on taking control of a suspect computer or PDA and its "operating" environment, mitigating potential exposures and risks to chain of custody, and

establishing and following a flowchart for the seizure of electronic evidence. An extensive list of appendices include websites, organizations, pertinent legislation, further readings, best practice recommendations, more information on hardware and software, and a recap of the federal rules of civil procedure.

Cybercrime

The Primer for Getting Started in Digital Forensics

Handbook of Computer Crime Investigation

Cybercrime Case Presentation
Using Digital Evidence to Solve Computer Crime
Digital Evidence and Computer Crime

Cyber Victimology provides a global socio-legal-victimological perspective on victimisation online, written in clear, non-technical terms, and presents practical solutions for the problem. Halder qualitatively analyzes the contemporary dimensions of cyber-crime victimisation, aiming to fill the gap in the existing literature on this topic. A literature review, along with case studies, allows the author

to analyze the current situation concerning cyber-crime victimisation. A profile of victims of cyber-crime has been developed based on the characteristics of different groups of victims. As well, new policy guidelines on the basis of UN documents on cybercrimes and victim justice are proposed to prevent such victimisation and to explore avenues for restitution of justice for cases of cyber-crime victimisation. This book shows how the effects of cyber victimisation in one sector can affect others. This book also examines why perpetrators choose to attack their victim/s in specific ways, which then have a ripple effect,

creating greater harm to other members of society in unexpected ways. This book is suitable for use as a textbook in cyber victimology courses and will also be of great interest to policy makers and activists working in this area.

Forensic Tools and Technology

An Introduction to Solving Crimes in Cyberspace

Modern Principles, Practices, and Algorithms

Cybercrime and Information Technology

Cybercrime, Digital Forensics and Jurisdiction

Cyber Crime and Forensic Computing