Data Hiding Exposing Concealed Data In Multimedia Operating Systems Le Devices And Network Protocols

Python Forensics provides many never-before-published proven forensic modules, libraries, and solutions that can be used right out of the box. In addition, detailed instruction and documentation provided with the code samples will allow even novice Python programmers to add their own unique twists or use the models presented to build new solutions. Rapid development of new cybercrime investigation tools is an essential ingredient in virtually every case and environment. Whether you are performing post-mortem investigation, executing live triage, extracting evidence from mobile devices or cloud services, or you are collecting and processing evidence from a network, Python forensic implementations can fill in the gaps. Drawing upon years of practical experience and using numerous examples and illustrative code samples, author Chet Hosmer discusses how to: Develop new forensic solutions independent of large vendor software release schedules Participate in an open-source workbench that facilitates direct involvement in the design and implementation of new methods that augment or replace existing tools Advance your career by creating new solutions along with the construction of cutting-edge automation solutions to solve old problems Provides hands-on tools, code samples, and detailed instruction and documentation that can be put to use immediately Discusses how to create a Python forensics workbench Covers effective forensic searching and indexing using Python Shows how to use Python to examine mobile device operating systems: iOS, Android, and Windows 8 Presents complete coverage of how to use Python scripts for network investigation

Explore core concepts, theories and formulations of phase-only Fresnel holograms, which paves the way for 3-D holographic display system.

Detecting Concealed Information and Deception: Recent Developments assembles contributions from the world's leading experts on all aspects of concealed information detection. This reference examines an array of different methods—behavioral, verbal interview and physiological—of detecting concealed information. Chapters from leading legal authorities address how to make use of detected information for present and future legal purposes. With a theoretical and empirical foundation, the book also covers new human interviewing techniques, including the highly influential Implicit Association Test among others. Presents research from Concealed Information Test (CIT) studies Explores the legal implications and admissibility of the CIT Covers EEG, event-related brain potentials (ERP) and autonomic detection measures Reviews multiple verbal lie detection tools Discusses ocular movements during deception and evasion Identifies how to perceive malicious intentions Explores personality dimensions associated with deception, including religion, age and gender

This book constitutes the refereed post-conference proceedings of the Fourth International Conference on IoT as a Service, IoTaaS 2018, which took place in Xi'an, China, in November 2018. The 50 revised full papers were carefully reviewed and selected from 83 submissions. The technical track present IoT-based services in various applications. In addition, there are three workshops: international workshop on edge computing for 5G/IoT, international workshop on green communications for internet of things, and international workshop on space-based internet of things.

Detect fraud faster—no matter how well hidden—with IDEA automation Fraud and Fraud Detection takes an advanced approach to fraud management, providing step-by-step guidance on automating detection and forensics using CaseWare's IDEA software. The book begins by reviewing the major types of fraud, then details the specific computerized tests that can detect them. Readers will learn to use complex data analysis techniques, including automation scripts, allowing easier and more sensitive detection of anomalies that require further review. The companion website provides access to a demo version of IDEA, along with sample scripts that allow readers to immediately test the procedures from the book. Business systems' electronic databases have grown tremendously with the rise of big data, and will continue to increase at significant rates. Fraudulent transactions are easily hidden in these enormous datasets, but Fraud and Fraud Detection helps readers gain the data analytics skills that can bring these anomalies to light. Step-by-step instruction and practical advice provide the specific abilities that will enhance the audit and investigation process. Readers will learn to: Understand the different areas of fraud and their specific detection methods Identify anomalies and risk areas using computerized techniques Develop a step-by-step plan for detecting fraud through data analytics Utilize IDEA software to automate detection and identification procedures The delineation of detection techniques for each type of fraud makes this book a must-have for students and new fraud prevention professionals, and the step-by-step guidance to automation and complex analytics will prove useful for even experienced examiners. With datasets growing exponentially, increasing both the speed and sensitivity of detection helps fraud professionals stay ahead of the game. Fraud and Fraud Detection is a guide to more efficient, more effective fraud identification.

The Wireshark Field Guide provides hackers, pen testers, and network administrators with practical guidance on capturing and interactively browsing computer network traffic. Wireshark is the world's foremost network protocol analyzer, with a rich feature set that includes deep inspection of hundreds of protocols, live capture, offline analysis and many other features. The Wireshark Field Guide covers the installation, configuration and use of this powerful multi-platform tool. The book give readers the hands-on skills to be more productive with Wireshark as they drill down into the information contained in real-time network traffic. Readers will learn the fundamentals of packet capture and inspection, the use of color codes and filters, deep analysis, including probes and taps, and much more. The Wireshark Field Guide is an indispensable companion for network technicians, operators, and engineers. Learn the fundamentals of using Wireshark in a concise field manual Quickly create functional filters that will allow you to get to work quickly on solving problems Understand the myriad of options and the deep functionality of Wireshark Solve common network problems Learn some advanced features, methods and helpful ways to work more quickly and efficiently

Encryption algorithms. Cryptographic technique. Access controls. Information controls. Inference controls.

Cryptography will continue to play important roles in developing of new security solutions which will be in great demand with the advent of high-speed next-generation communication systems and networks. This book discusses some of the critical security challenges faced by today's computing world and provides insights to possible mechanisms to defend against these attacks. The book contains sixteen chapters which deal with security and privacy issues in computing and communication networks, quantum cryptography and the evolutionary concepts of cryptography and their applications like chaos-based cryptography and DNA cryptography. It will be useful for researchers, engineers, graduate and doctoral students working in cryptography and security related areas. It will also be useful for faculty members of graduate schools and universities.

"If you've got nothing to hide," many people say, "you shouldn't worry about government surveillance." Others argue that we must sacrifice privacy for security. But as Daniel J. Solove argues in this important book, these arguments and many others are flawed. They are based on mistaken views about what it means to protect privacy and the costs and benefits of doing so. The debate between privacy and security has been framed incorrectly as a zero-sum game in which we are forced to choose between one value and the other. Why can't we have both? In this concise and accessible book, Solove exposes the fallacies of many pro-security arguments that have skewed law and policy to favor security at the expense of privacy. Protecting privacy isn't fatal to security measures; it merely involves adequate oversight and regulation. Solove traces the history of the privacy-security debate from the Revolution to the present day. He explains how the law protects privacy and examines concerns with new technologies. He then points out the failings of our current system and offers specific remedies. Nothing to Hide makes a powerful and compelling case for reaching a better balance between privacy and security and reveals why doing so is essential to protect our freedom and democracy"--Jacket.

This book constitutes the refereed proceedings of the International Symposium on Security in Computing and Communications, SSCC 2015, held in Kochi, India, in August 2015. The 36 revised full papers presented together with 13 short papers were carefully reviewed and selected from 157 submissions. The papers are organized in topical sections on security in cloud computing; authentication and access control systems; cryptography and steganography; system and network security; application security.

DescriptionBook teaches anyone interested to an in-depth discussion of what hacking is all about and how to save yourself. This book dives deep into:Basic security procedures one should follow to avoid being exploited. To identity theft.To know about password security essentials.How malicious hackers are profiting from identity and personal data theft. Book provides techniques and tools which are used by both criminal and ethical hackers, all the things that you will find here will show you how information security is compromised and how you can identify an attack in a system that you are trying to protect. Furthermore, you will also learn how you can minimize any damage to your system or stop an ongoing attack. This book is written for the benefit of the user to save himself from Hacking.Contents:HackingCyber Crime & SecurityComputer Network System and DNS WorkingHacking Skills & ToolsVirtualisation and Kali LinuxSocial Engineering & Reverse Social EngineeringFoot-printingScanningCryptographySteganographySystem

HackingMalwareSniffingPacket Analyser & Session HijackingDenial of Service (DoS)AttackWireless Network HackingWeb Server and Application VulnerabilitiesPenetration TestingSurface WebDeep Web and Dark Net

"This unique book delves down into the capabilities of hiding and obscuring data object within the Windows Operating System. However, one of the most noticeable and credible features of this publication is, it takes the reader from the very basics and background of data hiding techniques, and run's on the reading-road to arrive at some of the more complex methodologies employed for concealing data object from the human eye and/or the investigation. As a practitioner in the Digital Age, I can see this book siting on the shelves of Cyber Security Professionals, and those working in the world of Digital Forensics - it is a recommended read, and is in my opinion a very valuable asset to those who are interested in the landscape of unknown unknowns. This is a book which may well help to discover more about that which is not in immediate view of the onlooker, and open up the mind to expand its imagination beyond its accepted limitations of known knowns." - John Walker, CSIRT/SOC/Cyber Threat Intelligence Specialist Featured in Digital Forensics Magazine, February 2017

In the digital world, the need to protect online communications increase as the technology behind it evolves. There are many techniques currently available to encrypt and secure our communication channels. Data hiding techniques can take data confidentiality to a new level as we can hide our secret messages in ordinary, honest-looking data files. Steganography is the science of hiding data. It has several categorizations, and each type has its own techniques in hiding. Steganography has played a vital role in secret communication during wars since the dawn of history. In recent days, few computer users successfully manage to exploit their Windows® machine to conceal their private data. Businesses also have deep concerns about misusing data hiding techniques. Many employers are amazed at how easily their valuable information can get out of their company walls. In many legal cases a disgruntled employee would successfully steal company private data despite all security measures implemented using simple digital hiding techniques. Human right activists who live in countries controlled by oppressive regimes need ways to smuggle their online communications without attracting surveillance monitoring systems, continuously scan in/out internet traffic for interesting keywords and other artifacts. The same applies to journalists and whistleblowers all over the world. Computer forensic investigators, law enforcements officers, intelligence services and IT security professionals need a guide to tell them where criminals can conceal their data in Windows® OS & multimedia files and how they can discover concealed data quickly and retrieve it in a forensic way. Data Hiding Techniques in Windows OS is a response to all these concerns. Data hiding topics are usually approached in most books using an academic method, with long math equations about how each hiding technique algorithm works behind the scene, and are usually targeted at people who work in the academic arenas. This book teaches professionals and end users alike how they can hide their data and discover the hidden ones using a variety of ways under the most commonly used operating system on earth, Windows®. Rage is an unprecedented and intimate tour de force of new reporting on the Trump presidency facing a global pandemic, economic disaster and racial unrest. Woodward, the #1 international bestselling author of Fear: Trump in the White House, has uncovered the precise moment the president was warned that the Covid-19 epidemic would be the biggest national security threat to his presidency. In dramatic detail, Woodward takes readers into the Oval Office as Trump’s head pops up when he is told in January 2020 that the pandemic could reach the scale of the 1918 Spanish Flu that killed 675,000 Americans. In 17 on-the-record interviews with Woodward over seven volatile months—an utterly vivid window into Trump’s mind—the president provides a self-portrait that is part denial and part combative interchange mixed with surprising moments of doubt as he glimpses the perils in the presidency and what he calls the “dynamite behind every door.” At key decision points, Rage shows how Trump’s responses to the crises of 2020 were rooted in the instincts, habits and style he developed during his first three years as president. Revisiting the earliest days of the Trump presidency, Rage reveals how Secretary of Defense James Mattis, Secretary of State Rex Tillerson and Director of National Intelligence Dan Coats struggled to keep the country safe as the president dismantled any semblance of collegial national security decision making.

Rage draws from hundreds of hours of interviews with firsthand witnesses as well as participants' notes, emails, diaries, calendars and confidential documents. Woodward obtained 25 never-seen personal letters exchanged between Trump and North Korean leader Kim Jong Un, who describes the bond between the two leaders as out of a "fantasy film." Trump insists to Woodward he will triumph over Covid-19 and the economic calamity. "Don't worry about it, Bob. Okay?" Trump told the author in July. "Don't worry about it. We'll get to do another book. You'll find I was right."

As data hiding detection and forensic techniques have matured, people are creating more advanced stealth methods for spying, corporate espionage, terrorism, and cyber warfare all to avoid detection. Data Hiding provides an exploration into the present day and next generation of tools and techniques used in covert communications, advanced malware methods and data concealment tactics. The hiding techniques outlined include the latest technologies including mobile devices, multimedia, virtualization and others. These concepts provide corporate, goverment and military personnel with the knowledge to investigate and defend against insider threats, spy techniques, espionage, advanced malware and secret communications. By understanding the plethora of threats, you will gain an understanding of the methods to defend oneself from these threats through detection, investigation, mitigation and prevention. Provides many real-world examples of data concealment on the latest technologies including iOS, Android, VMware, MacOS X, Linux and Windows 7 Dives deep into the less known approaches to data hiding, covert communications, and advanced malware Includes never before published information about next generation methods of data hiding Outlines a well-defined methodology for countering threats Looks ahead at future predictions for data hiding

Apply a methodology and practical solutions for monitoring the behavior of the Internet of Things (IoT), industrial control systems (ICS), and other critical network devices with the inexpensive Raspberry Pi. With this book, you will master passive monitoring and detection of aberrant behavior, and learn how to generate early indications and warning of attacks targeting IoT, ICS, and other critical network resources. Defending IoT Infrastructures with the Raspberry Pi provides techniques and scripts for the discovery of dangerous data leakage events emanating from IoT devices. Using Raspbian Linux and specialized Python scripts, the book walks through the steps necessary to monitor, detect, and respond to attacks targeting IoT devices. There are several books that cover IoT, IoT security, Raspberry Pi, and Python separately, but this book is the first of its kind to put them all together. It takes a practical approach, providing an entry point and level playing field for a wide range of individuals, small companies, researchers, academics, students, and hobbyists to participate. What You'll Learn Create a secure, operational Raspberry Pi IoT sensor Configure and train the sensor using “normal” IoT behavior Establish analytics for detecting aberrant activities Generate real-time alerts to preempt attacks Identify and report data-leakage events originating from IoT devices Develop custom Python applications for cybersecurity Who This Book Is For Cybersecurity specialists, professors teaching in undergraduate and graduate programs in cybersecurity, students in cybersecurity and computer science programs, software developers and engineers developing new cybersecurity defenses, incident response teams, software developers and engineers in general, and hobbyists wanting to expand the application of Raspberry Pi into both IoT and cybersecurity

The 22 full papers and 12 shorts papers presented in this volume were carefully reviewed and selected from 70 submissions. The contributions are covering the following topics: deep learning for multimedia security; digital forensics and anti-forensics; digital watermarking; information hiding; steganography and steganalysis; authentication and security.

This book has been prepared to meet the requirements of students preparing for GATE examination in Computer Science & Engineering discipline as per the prescribed.

A successor to the popular Artech House title Information Hiding Techniques for Steganography and Digital Watermarking, this comprehensive and up-to-date new resource gives the reader a thorough review of steganography, digital watermarking and media fingerprinting with possible applications to modern communication, and a survey of methods used to hide information in modern media. This book explores Steganography, as a means by which two or more parties may communicate using invisible or subliminal communication. "Steganalysis" is described as methods which can be used to break steganographic communication. This comprehensive resource also includes an introduction to watermarking and its methods, a means of hiding copyright data in images and discusses components of commercial multimedia applications that are subject to illegal use. This book demonstrates a working knowledge of watermarking's pros and cons, and the legal implications of watermarking and copyright issues on the Internet.

The common use of the Internet and cloud services in transmission of large amounts of data over open networks and insecure channels, exposes that private and secret data to serious situations. Ensuring the information transmission over the Internet is safe and secure has become crucial, consequently information security has become one of the most important issues of human communities because of increased data transmission over social networks. Digital Media Steganography: Principles, Algorithms, and Advances covers fundamental theories and algorithms for practical design, while providing a comprehensive overview of the most advanced methodologies and modern techniques in the field of steganography. The topics covered present a collection of high-quality research works written in a simple manner by world-renowned leaders in the field dealing with specific research problems. It presents the state-of-the-art as well as the most recent trends in digital media steganography. Covers fundamental theories and algorithms for practical design which form the basis of modern digital media steganography

Provides new theoretical breakthroughs and a number of modern techniques in steganography Presents the latest advances in digital media steganography such as using deep learning and artificial neural network as well as Quantum Steganography

Hackers have uncovered the dark side of cryptography—thatdevice developed to defeat Trojan horses, viruses, password theft,and other cyber-crime. It’s called cryptovirology, the art ofturning the very methods designed to protect your data into a meansof subverting it. In this fascinating, disturbing volume, theexperts who first identified cryptovirology show you exactly whatyou’re up against and how to fight back. They will take you inside the brilliant and devious mind of ahacker—as much an addict as the vacant-eyed denizen of thecrackhouse—so you can feel the rush and recognize youropponent’s power. Then, they will arm you for thecounterattack. This book reads like a futuristic fantasy, but be assured, thethreat is ominously real. Vigilance is essential, now. Understand the mechanics of computationally secure informationstealing Learn how non-zero sum Game Theory is used to developsurvivable malware Discover how hackers use public key cryptography to mountextortion attacks Recognize and combat the danger of kleptographic attacks onsmart-card devices Build a strong arsenal against a cryptovirology attack

The mid-1990ssaw an exciting convergenceof a number of dieren t information protection technologies, whose theme was the hiding (as opposed to encryption) of information. Copyright marking schemes are about hiding either copyright notices or individual serial numbers imperceptibly in digital audio and video, as a component in intellectual property protection systems; anonymous c- munication is another area of rapid growth, with people designing systems for electronic cash, digital elections, and privacy in mobile communications; se- rity researchers are also interested in 'stray' communication channels, such as those which arise via shared resourcesin operating systems or the physical le- age of information through radio frequency emissions; and finally, many workers in these fields drew inspiration from 'classical' hidden communication methods such as steganography and spread-spectrum radio. The first international workshop on this new emergent discipline of inf- mation hiding was organised by Ross Anderson and held at the Isaac Newton Institute, Cambridge, from the 30th May to the 1st June 1996, and was judged by attendees to be a successful and significant event. In addition to a number of research papers, we had invited talks from David Kahn on the history of steganography and from Gus Simmons on the history of subliminal channels. We also had a number of discussion sessions, culminating in a series of votes on common terms and definitions. These papers and talks, together with minutes of the discussion, can be found in the proceedings, which are published in this series as Volume 1174.

Rapidly generating and processing large amounts of data, supercomputers are currently at the leading edge of computing technologies. Supercomputers are employed in many different fields, establishing them as an integral part of the computational sciences. Research and Applications in Global Supercomputing investigates current and emerging research in the field, as well as the application of this technology to a variety of areas. Highlighting a broad range of concepts, this publication is a comprehensive reference source for professionals, researchers, students, and practitioners interested in the various topics pertaining to supercomputing and how this technology can be applied to solve problems in a multitude of disciplines.

Part of the Jones & Bartlett Learning Information Systems Security & Assurance Series Cyberwarfare puts students on the real-world battlefield of cyberspace! Students will learn the history of cyberwarfare, techniques used in both offensive and defensive information warfare, and how cyberwarfare is shaping military doctrine. Written by subject matter experts, this book combines accessible explanations with realistic experiences and case studies that make cyberwar evident and understandable. Key Features: - Incorporates hands-on activities, relevant examples, and realistic exercises to prepare readers for their future careers. - Includes detailed case studies drawn from actual cyberwarfare operations and tactics. - Provides fresh capabilities information drawn from the Snowden NSA leaks

The mobile threat landscape is evolving bringing about new forms of data loss. No longer can organizations rely on security policies designed during the PC era. Mobile is different and therefore requires a revised approach to countermeasures to mitigate data loss. Understanding these differences is fundamental to creating a new defense-in-depth strategy designed for mobile. Mobile Data Loss: Threats & Countermeasures reviews the mobile threat landscape using a hacker mind-set to outline risks and attack vectors that include malware, risky apps, operating system compromises, network attacks, and user behaviours. This provides the basis for then outlining countermeasures for defining a holistic mobile security methodology that encompasses proactive protections, response mechanisms, live monitoring, and incident response. Designing a comprehensive mobile security strategy is key. Mobile Data Loss: Threats & Countermeasures outlines the threats and strategies for protecting devices from a plethora of data loss vectors. Outlines differences in mobile devices versus PCs Reviews mobile threat landscape using a hacker mind-set to outline risks and attack vectors Summarizes the tools and techniques for implementing enterprise countermeasures Maps mobile to common security compliances including PCI, HIPAA, and CJIS Provides a defense-in-depth methodology and strategy for enterprises to minimize data loss

Data HidingExposing Concealed Data in Multimedia, Operating Systems, Mobile Devices and Network ProtocolsNewnes

This book includes high-quality research papers presented at the Fourth International Conference on Innovative Computing and Communication (ICICC 2021), which is held at the Shaheed Sukhdev College of Business Studies, University of Delhi,

Delhi, India, on February 20–21, 2021. Introducing the innovative works of scientists, professors, research scholars, students and industrial experts in the field of computing and communication, the book promotes the transformation of fundamental research into institutional and industrialized research and the conversion of applied exploration into real-time applications.

SpringerBriefs present concise summaries of cutting-edge research and practical applications across a wide spectrum of fields. Featuring compact volumes of 50 to 100 pages (approximately 20,000- 40,000 words), the series covers a range of content from professional to academic. Briefs allow authors to present their ideas and readers to absorb them with minimal time investment. As part of Springer's eBook collection, SpringBriefs are published to millions of users worldwide. Information/Data Leakage poses a serious threat to companies and organizations, as the number of leakage incidents and the cost they inflict continues to increase. Whether caused by malicious intent, or an inadvertent mistake, data loss can diminish a company's brand, reduce shareholder value, and damage the company's goodwill and reputation. This book aims to provide a structural and comprehensive overview of the practical solutions and current research in the DLP domain. This is the first comprehensive book that is dedicated entirely to the field of data leakage and covers all important challenges and techniques to mitigate them. Its informative, factual pages will provide researchers, students and practitioners in the industry with a comprehensive, yet concise and convenient reference source to this fascinating field. We have grouped existing solutions into different categories based on a described taxonomy. The presented taxonomy characterizes DLP solutions according to various aspects such as: leakage source, data state, leakage channel, deployment scheme, preventive/detective approaches, and the action upon leakage. In the commercial part we review solutions of the leading DLP market players based on professional research reports and material obtained from the websites of the vendors. In the academic part we cluster the academic work according to the nature of the leakage and protection into various categories. Finally, we describe main data leakage scenarios and present for each scenario the most relevant and applicable solution or approach that will mitigate and reduce the likelihood and/or impact of the leakage scenario.

This volume constitutes the refereed proceedings of the International Conference on Digital Enterprise and Information Systems, held in London during July 20 - 22, 2011. The 70 revised full papers presented were carefully reviewed and selected. They are organized in topical sections on cryptography and data protection, embedded systems and software, information technology management, e-business applications and software, critical computing and storage, distributed and parallel applications, digital management products, image processing, digital enterprises, XML-based languages, digital libraries, and data mining.

Hiding Behind the Keyboard: Uncovering Covert Communication Methods with Forensic Analysis exposes the latest electronic covert communication techniques used by cybercriminals, along with the needed investigative methods for identifying them. The book shows how to use the Internet for legitimate covert communication, while giving investigators the information they need for detecting cybercriminals who attempt to hide their true identity. Intended for practitioners and investigators, the book offers concrete examples on how to communicate securely, serving as an ideal reference for those who truly need protection, as well as those who investigate cybercriminals. Covers high-level strategies, what they can achieve, and how to implement them Shows discovery and mitigation methods using examples, court cases, and more Explores how social media sites and gaming technologies can be used for illicit communications activities Explores the currently in-use technologies such as TAILS and TOR that help with keeping anonymous online

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

Integrating Python with Leading Computer Forensic Platforms takes a definitive look at how and why the integration of Python advances the field of digital forensics. In addition, the book includes practical, never seen Python examples that can be immediately put to use. Noted author Chet Hosmer demonstrates how to extend four key Forensic Platforms using Python, including EnCase by Guidance Software, MPE+ by AccessData, The Open Source Autopsy/SleuthKit by Brian Carrier and WetStone Technologies, and Live Acquisition and

Triage Tool US-LATT. This book is for practitioners, forensic investigators, educators, students, private investigators, or anyone advancing digital forensics for investigating cybercrime. Additionally, the open source availability of the examples allows for sharing and growth within the industry. This book is the first to provide details on how to directly integrate Python into key forensic platforms. Provides hands-on tools, code samples, detailed instruction, and documentation that can be immediately put to use Shows how to integrate Python with popular digital forensic platforms, including EnCase, MPE+, The Open Source Autopsy/SleuthKit, and US-LATT Presents complete coverage of how to use Open Source Python scripts to extend and modify popular digital forensic Platforms

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.

This book constitutes the refereed proceedings of the 6th International Workshop on Information Security Applications, WISA 2005, held in Jeju Island, Korea, in August 2005. The 29 revised full papers presented were carefully selected during two rounds of reviewing and improvement from 168 submissions. The papers are organized in topical sections on security analysis and attacks, systems security, network security, DRM/software security, efficient HW implementation, side-channel attacks, privacy/anonymity, and efficient implementation.

Join the technological revolution that's taking the financial world by storm. Mastering Bitcoin is your guide through the seemingly complex world of bitcoin, providing the knowledge you need to participate in the internet of money. Whether you're building the next killer app, investing in a startup, or simply curious about the technology, this revised and expanded second edition provides essential detail to get you started. Bitcoin, the first successful decentralized digital currency, is still in its early stages and yet it's already spawned a multi-billion-dollar global economy open to anyone with the knowledge and passion to participate. Mastering Bitcoin provides the knowledge. You simply supply the passion. The second edition includes: A broad introduction of bitcoin and its underlying blockchain—ideal for non-technical users, investors, and business executives An explanation of the technical foundations of bitcoin and cryptographic currencies for developers, engineers, and software and systems architects Details of the bitcoin decentralized network, peer-to-peer architecture, transaction lifecycle, and security principles New developments such as Segregated Witness, Payment Channels, and Lightning Network A deep dive into blockchain applications, including how to combine the building blocks offered by this platform into higher-level applications User stories, analogies, examples, and code snippets illustrating key technical concepts

Everyone knows the super rich are hiding tons of money and not paying near enough taxes. This common knowledge that the wealthy have found ways around taxation by moving their assets to countries that don t tax them raises the question of how much of the world s wealth is hidden and how. Gabriel Zucman, a prominent young French economist, has come up with novel yet effective ways of quantifying how big the problem is, how tax havens work and are organized, and how we can begin to tackle the problem. Digging deep into the global data and comparing it with that of individual and international institutions, "The Hidden Wealth of Nations" offers for the first time a full picture of how this sophisticated international system works and is organized in practice. It is an invaluable glimpse at one of the most powerful forces contributing to inequality across the globe."

This multi-volume set covers a wide range of topics on innovation, which are all of great interest to academics, policymakers, university administrators, state and regional economic development officials, and students. Two unique features of the volume are the large body of global evidence on innovation presented and its consideration of the following timely and important topics in innovation: cybersecurity, open innovation, the globalization of R&D, and university technology transfer. Innovation is a topic of great importance in many fields in business administration, such as management, strategy, operations management, finance, marketing, and accounting, as well as in numerous social science disciplines, including economics, sociology, political science, and psychology. This volume fully reflects such interdisciplinary approaches.Volume 1 provides extensive global evidence on university technology transfer and innovation partnerships. Volume 2 is focused on the managerial and public policy implications of the globalization of R&D. Volume 3 presents state-of-the-art theoretical and empirical evidence on open innovation. Volume 4 is a comprehensive analysis of cybersecurity. This set is essential reading for those who wish to have a comprehensive understanding of the antecedents and consequences of innovation. This book constitutes the proceedings of the satellite workshops held around the 18th International Conference on Applied Cryptography and Network Security, ACNS 2020, in Rome, Italy, in October 2020. The 31 papers presented in this volume were carefully reviewed and selected from 65 submissions. They stem from the following workshops: AIBlock 2020: Second International Workshop on Application Intelligence and Blockchain Security AIHWS 2020: First International Workshop on Artificial Intelligence in Hardware Security AIoTS 2020: Second International Workshop on Artificial Intelligence and Industrial Internet-of-Things Security Cloud S&P 2020: Second International Workshop on Cloud Security and Privacy SCI 2020: First International Workshop on Secure Cryptographic Implementation SecMT 2020: First International Workshop on Security in Mobile Technologies SiMLA 2020: Second International Workshop on Security in Machine Learning and its Applications Develop and implement an effective end-to-end security program Today’s complex world of mobile platforms, cloud computing, and ubiquitous data access puts new security demands on every IT professional. Information Security: The Complete Reference, Second Edition (previously titled Network Security: The Complete Reference) is the only comprehensive book that offers vendor-neutral details on all aspects of information protection, with an eye toward the evolving threat landscape. Thoroughly revised and expanded to cover all aspects of modern information security—from concepts to details—this edition provides a one-stop reference equally applicable to the beginner and the seasoned professional. Find out how to build a holistic security program based on proven methodology, risk analysis, compliance, and business needs. You’ll learn how to successfully protect data, networks, computers, and applications. In-depth chapters cover data protection, encryption, information rights management, network security, intrusion detection and prevention, Unix and Windows security, virtual and cloud security, secure application development, disaster recovery, forensics, and real-world attacks and countermeasures. Included is an extensive security glossary, as well as standards-based references. This is a great resource for professionals and students alike. Understand security concepts and building blocks Identify vulnerabilities and mitigate risk Optimize authentication and authorization Use IRM and encryption to protect unstructured data Defend storage devices, databases, and software Protect network routers, switches, and firewalls Secure VPN, wireless, VoIP, and PBX infrastructure Design intrusion detection and prevention systems Develop secure Windows, Java, and mobile applications Perform incident response and forensic analysis

A comprehensive review of the most recent applications of intelligent multi-modal data processing Intelligent Multi-Modal Data Processing contains a review of the most recent applications of data processing. The Editors and contributors – noted experts on the topic – offer a review of the new and challenging areas of multimedia data processing as well as state-of-the-art algorithms to solve the problems in an intelligent manner. The text provides a clear understanding of the real-life implementation of different statistical theories and explains how to implement various statistical theories. Intelligent Multi-Modal Data Processing is an authoritative guide for developing innovative research ideas for interdisciplinary research practices. Designed as a practical resource, the book contains tables to compare statistical analysis results of a novel technique to that of the state-of-the-art techniques and illustrations in the form of algorithms to establish a pre-processing and/or post-processing technique for model building. The book also contains images that show the efficiency of the algorithm on standard data set. This important book: Includes an in-depth analysis of the state-of-the-art applications of signal and data processing Contains contributions from noted experts in the field Offers information on hybrid differential evolution for optimal multilevel image thresholding Presents a fuzzy decision based multi-objective evolutionary method for video summarisation Written for students of technology and management, computer scientists and professionals in information technology, Intelligent Multi-Modal Data Processing brings together in one volume the range of multi-modal data processing.