

Ios Hackers Handbook

The first comprehensive guide to discovering and preventing attacks on the Android OS As the Android operating system continues to increase its share of the smartphone market, smartphone hacking remains a growing threat. Written by experts who rank among the world's foremost Android security researchers, this book presents vulnerability discovery, analysis, and exploitation tools for the good guys. Following a detailed explanation of how the Android OS works and its overall security architecture, the authors examine how vulnerabilities can be discovered and exploits developed for various system components, preparing you to defend against them. If you are a mobile device administrator, security researcher, Android app developer, or consultant responsible for evaluating Android security, you will find this guide is essential to your toolbox. A crack team of leading Android security researchers explain Android security risks, security design and architecture, rooting, fuzz testing, and vulnerability analysis Covers Android application building blocks and security as well as debugging and auditing Android apps Prepares mobile device administrators, security researchers, Android app developers, and security consultants to defend Android systems against attack Android Hacker's Handbook is the first comprehensive resource for IT professionals charged with smartphone security.

This handbook reveals those aspects of hacking least understood by network administrators. It analyzes subjects through a hacking/security dichotomy that details hacking maneuvers and defenses in the same context. Chapters are organized around specific components and tasks, providing theoretical background that prepares network defenders for the always-changing tools and techniques of intruders. Part I introduces programming, protocol, and attack concepts. Part II addresses subject areas (protocols, services, technologies, etc.) that may be vulnerable. Part III details consolidation activities that hackers may use following penetration.

This much-anticipated revision, written by the ultimate group of top security experts in the world, features 40 percent new content on how to find security holes in any operating system or application New material addresses the many new exploitation techniques that have been discovered since the first edition, including attacking "unbreakable" software packages such as McAfee's Enterscept, Mac OS X, XP, Office 2003, and Vista Also features the first-ever published information on exploiting Cisco's IOS, with content that has never before been explored The companion Web site features downloadable code files

Provides information on ways to break into and defend seven database servers, covering such topics as identifying vulnerabilities, how an attack is carried out, and how to stop an attack.

Looks at computer hacking, from the early 1980s to the present day, offering information on ways to protect oneself from hackers.

Exposing hacker methodology with concrete examples, this volume shows readers how to outwit computer predators. With screenshots and step by step instructions, the book discusses how to get into a Windows operating system without a username or password and how to hide an IP address to avoid detection. It explains how to find virtually anything on the Internet and explores techniques that hackers can use to exploit physical access, network access, and wireless vectors. The book profiles a variety of attack tools and examines how Facebook and other sites can be used to conduct social networking attacks.

Modern web applications are built on a tangle of technologies that have been developed over time and then haphazardly pieced together. Every piece of the web application stack, from HTTP requests to browser-side scripts, comes with important yet subtle security consequences. To keep users safe, it is essential for developers to confidently navigate this landscape. In *The Tangled Web*, Michal Zalewski, one of the world's top browser security experts, offers a compelling narrative that explains exactly how browsers work and why they're fundamentally insecure. Rather than dispense simplistic advice on vulnerabilities, Zalewski examines the entire browser security model, revealing weak points and providing crucial information for shoring up web application security. You'll learn how to: –Perform common but surprisingly complex tasks such as URL parsing and HTML sanitization –Use modern security features like Strict Transport Security, Content Security Policy, and Cross-Origin Resource Sharing –Leverage many variants of the same-origin policy to safely compartmentalize complex web applications and protect user credentials in case of XSS bugs –Build mashups and embed gadgets without getting stung by the tricky frame navigation policy –Embed or host user-supplied content without running into the trap of content sniffing For quick reference, "Security Engineering Cheat Sheets" at the end of each chapter offer ready solutions to problems you're most likely to encounter. With coverage extending as far as planned HTML5 features, *The Tangled Web* will help you create secure web applications that stand the test of time.

Hackers exploit browser vulnerabilities to attack deep within networks The Browser Hacker's Handbook gives a practical understanding of hacking the everyday web browser and using it as a beachhead to launch further attacks deep into corporate networks. Written by a team of highly experienced computer security experts, the handbook provides hands-on tutorials exploring a range of current attack methods. The web browser has become the most popular and widely used computer "program" in the world. As the gateway to the Internet, it is part of the storefront to any business that operates online, but it is also one of the most vulnerable entry points of any system. With attacks on the rise, companies are increasingly employing browser-hardening techniques to protect the unique vulnerabilities inherent in all currently used browsers. The Browser Hacker's Handbook thoroughly covers complex security issues and explores relevant topics such as: Bypassing the Same Origin Policy ARP spoofing, social engineering, and phishing to access browsers DNS tunneling, attacking web applications, and proxying—all from the browser Exploiting the browser and its ecosystem (plugins and extensions) Cross-origin attacks, including Inter-

protocol Communication and Exploitation The Browser Hacker's Handbook is written with a professional security engagement in mind. Leveraging browsers as pivot points into a target's network should form an integral component into any social engineering or red-team security assessment. This handbook provides a complete methodology to understand and structure your next browser penetration test.

Explains how and why hackers break into computers, steal information, and deny services to machines' legitimate users, and discusses strategies and tools used by hackers and how to defend against them.

Modern cars are more computerized than ever. Infotainment and navigation systems, Wi-Fi, automatic software updates, and other innovations aim to make driving more convenient. But vehicle technologies haven't kept pace with today's more hostile security environment, leaving millions vulnerable to attack. The Car Hacker's Handbook will give you a deeper understanding of the computer systems and embedded software in modern vehicles. It begins by examining vulnerabilities and providing detailed explanations of communications over the CAN bus and between devices and systems. Then, once you have an understanding of a vehicle's communication network, you'll learn how to intercept data and perform specific hacks to track vehicles, unlock doors, glitch engines, flood communication, and more. With a focus on low-cost, open source hacking tools such as Metasploit, Wireshark, Kayak, can-utils, and ChipWhisperer, The Car Hacker's Handbook will show you how to: –Build an accurate threat model for your vehicle –Reverse engineer the CAN bus to fake engine signals –Exploit vulnerabilities in diagnostic and data-logging systems –Hack the ECU and other firmware and embedded systems –Feed exploits through infotainment and vehicle-to-vehicle communication systems –Override factory settings with performance-tuning techniques –Build physical and virtual test benches to try out exploits safely If you're curious about automotive security and have the urge to hack a two-ton computer, make The Car Hacker's Handbook your first stop.

Cutting-edge techniques for finding and fixing critical security flaws Fortify your network and avert digital catastrophe with proven strategies from a team of security experts. Completely updated and featuring 13 new chapters, Gray Hat Hacking, The Ethical Hacker's Handbook, Fifth Edition explains the enemy's current weapons, skills, and tactics and offers field-tested remedies, case studies, and ready-to-try testing labs. Find out how hackers gain access, overtake network devices, script and inject malicious code, and plunder Web applications and browsers. Android-based exploits, reverse engineering techniques, and cyber law are thoroughly covered in this state-of-the-art resource. And the new topic of exploiting the Internet of things is introduced in this edition. •Build and launch spoofing exploits with Ettercap •Induce error conditions and crash software using fuzzers •Use advanced reverse engineering to exploit Windows and Linux software •Bypass Windows Access Control and memory protection schemes •Exploit web applications with Padding Oracle Attacks •Learn the use-after-free technique used in recent zero days •Hijack web browsers with advanced XSS attacks •Understand ransomware and how it takes control of your desktop •Dissect Android malware with JEB and DAD decompilers •Find one-day vulnerabilities with binary diffing •Exploit wireless systems with Software Defined Radios (SDR) •Exploit Internet of things devices •Dissect and exploit embedded devices •Understand bug bounty programs •Deploy next-generation honeypots •Dissect ATM malware and analyze common ATM attacks •Learn the business side of ethical hacking

State-of-the-Art Software Security Testing: Expert, Up to Date, and Comprehensive The Art of Software Security Testing delivers in-depth, up-to-date, battle-tested techniques for anticipating and identifying software security problems before the "bad guys" do. Drawing on decades of experience in application and penetration testing, this book's authors can help you transform your approach from mere "verification" to proactive "attack." The authors begin by systematically reviewing the design and coding vulnerabilities that can arise in software, and offering realistic guidance in avoiding them. Next, they show you ways to customize software debugging tools to test the unique aspects of any program and then analyze the results to identify exploitable vulnerabilities. Coverage includes Tips on how to think the way software attackers think to strengthen your defense strategy Cost-effectively integrating security testing into your development lifecycle Using threat modeling to prioritize testing based on your top areas of risk Building testing labs for performing white-, grey-, and black-box software testing Choosing and using the right tools for each testing project Executing today's leading attacks, from fault injection to buffer overflows Determining which flaws are most likely to be exploited by real-world attackers

Requiring no prior hacking experience, Ethical Hacking and Penetration Testing Guide supplies a complete introduction to the steps required to complete a penetration test, or ethical hack, from beginning to end. You will learn how to properly utilize and interpret the results of modern-day hacking tools, which are required to complete a penetration test. The book covers a wide range of tools, including Backtrack Linux, Google reconnaissance, MetaGooFil, dig, Nmap, Nessus, Metasploit, Fast Track Autopwn, Netcat, and Hacker Defender rootkit. Supplying a simple and clean explanation of how to effectively utilize these tools, it details a four-step methodology for conducting an effective penetration test or hack. Providing an accessible introduction to penetration testing and hacking, the book supplies you with a fundamental understanding of offensive security. After completing the book you will be prepared to take on in-depth and advanced topics in hacking and penetration testing. The book walks you through each of the steps and tools in a structured, orderly manner allowing you to understand how the output from each tool can be fully utilized in the subsequent phases of the penetration test. This process will allow you to clearly see how the various tools and phases relate to each other. An ideal resource for those who want to learn about ethical hacking but don't know where to start, this book will help take your hacking skills to the next level. The topics described in this book comply with international standards and with what is being taught in international certifications. This book is a practical guide to discovering and exploiting security flaws in web applications. The authors explain each category of vulnerability using real-world examples,

screen shots and code extracts. The book is extremely practical in focus, and describes in detail the steps involved in detecting and exploiting each kind of security weakness found within a variety of applications such as online banking, e-commerce and other web applications. The topics covered include bypassing login mechanisms, injecting code, exploiting logic flaws and compromising other users. Because every web application is different, attacking them entails bringing to bear various general principles, techniques and experience in an imaginative way. The most successful hackers go beyond this, and find ways to automate their bespoke attacks. This handbook describes a proven methodology that combines the virtues of human intelligence and computerized brute force, often with devastating results. The authors are professional penetration testers who have been involved in web application security for nearly a decade. They have presented training courses at the Black Hat security conferences throughout the world. Under the alias "PortSwigger", Dafydd developed the popular Burp Suite of web application hack tools.

Unearth some of the most significant attacks threatening iOS applications in recent times and learn methods of patching them to make payment transactions and personal data sharing more secure. When it comes to security, iOS has been in the spotlight for a variety of reasons. Although a tough system to manipulate, there are still critical security bugs that can be exploited. In response to this issue, author Kunal Relan offers a concise, deep dive into iOS security, including all the tools and methods to master reverse engineering of iOS apps and penetration testing. What you will learn:

- Get a deeper understanding of iOS infrastructure and architecture
- Obtain deep insights of iOS security and jailbreaking
- Master reverse engineering techniques for securing your iOS Apps
- Discover the basics of application development for iOS
- Employ security best practices for iOS applications

Who is this book for: Security professionals, Information Security analysts, iOS reverse engineers, iOS developers, and readers interested in secure application development in iOS.

Hack your antivirus software to stamp out future vulnerabilities The Antivirus Hacker's Handbook guides you through the process of reverse engineering antivirus software. You explore how to detect and exploit vulnerabilities that can be leveraged to improve future software design, protect your network, and anticipate attacks that may sneak through your antivirus' line of defense. You'll begin building your knowledge by diving into the reverse engineering process, which details how to start from a finished antivirus software program and work your way back through its development using the functions and other key elements of the software. Next, you leverage your new knowledge about software development to evade, attack, and exploit antivirus software—all of which can help you strengthen your network and protect your data. While not all viruses are damaging, understanding how to better protect your computer against them can help you maintain the integrity of your network. Discover how to reverse engineer your antivirus software Explore methods of antivirus software evasion Consider different ways to attack and exploit antivirus software Understand the current state of the antivirus software market, and get recommendations for users and vendors who are leveraging this software The Antivirus Hacker's Handbook is the essential reference for software reverse engineers, penetration testers, security researchers, exploit writers, antivirus vendors, and software engineers who want to understand how to leverage current antivirus software to improve future applications.

Written by two experienced penetration testers the material presented discusses the basics of the OS X environment and its vulnerabilities. Including but limited to; application porting, virtualization utilization and offensive tactics at the kernel, OS and wireless level. This book provides a comprehensive in-depth guide to exploiting and compromising the OS X platform while offering the necessary defense and countermeasure techniques that can be used to stop hackers As a resource to the reader, the companion website will provide links from the authors, commentary and updates. Provides relevant information including some of the latest OS X threats Easily accessible to those without any prior OS X experience Useful tips and strategies for exploiting and compromising OS X systems Includes discussion of defensive and countermeasure applications and how to use them Covers mobile IOS vulnerabilities

Covers everything from illegal aspects to understandable explanations of telecomputing for every modem user. . . .a reference book on many communications subjects.--Computer Shopper. Sold over 40,000 copies in England. Revised U.S. version proven with direct mail success.

As more and more vulnerabilities are found in the Mac OS X (Leopard) operating system, security researchers are realizing the importance of developing proof-of-concept exploits for those vulnerabilities. This unique tome is the first book to uncover the flaws in the Mac OS X operating system—and how to deal with them. Written by two white hat hackers, this book is aimed at making vital information known so that you can find ways to secure your Mac OS X systems, and examines the sorts of attacks that are prevented by Leopard's security defenses, what attacks aren't, and how to best handle those weaknesses.

This book is a concise one-stop desk reference and synopsis of basic knowledge and skills for Cisco certification prep. For beginning and experienced network engineers tasked with building LAN, WAN, and data center connections, this book lays out clear directions for installing, configuring, and troubleshooting networks with Cisco devices. The full range of certification topics is covered, including all aspects of IOS, NX-OS, and ASA software. The emphasis throughout is on solving the real-world challenges engineers face in configuring network devices, rather than on exhaustive descriptions of hardware features. This practical desk companion doubles as a comprehensive overview of the basic knowledge and skills needed by CCENT, CCNA, and CCNP exam takers. It distills a comprehensive library of cheat sheets, lab configurations, and advanced commands that the authors assembled as senior network engineers for the benefit of junior engineers they train, mentor on the job, and prepare for Cisco certification exams. Prior familiarity with Cisco routing and switching is desirable but not necessary, as Chris Carthern, Dr. Will Wilson, Noel Rivera, and Richard Bedwell start their book with a review of the basics of

configuring routers and switches. All the more advanced chapters have labs and exercises to reinforce the concepts learned. This book differentiates itself from other Cisco books on the market by approaching network security from a hacker's perspective. Not only does it provide network security recommendations but it teaches you how to use black-hat tools such as oclHashcat, Loki, Burp Suite, Scapy, Metasploit, and Kali to actually test the security concepts learned. Readers of Cisco Networks will learn How to configure Cisco switches, routers, and data center devices in typical corporate network architectures The skills and knowledge needed to pass Cisco CCENT, CCNA, and CCNP certification exams How to set up and configure at-home labs using virtual machines and lab exercises in the book to practice advanced Cisco commands How to implement networks of Cisco devices supporting WAN, LAN, and data center configurations How to implement secure network configurations and configure the Cisco ASA firewall How to use black-hat tools and network penetration techniques to test the security of your network

Cutting-edge techniques for finding and fixing critical security flaws Fortify your network and avert digital catastrophe with proven strategies from a team of security experts. Completely updated and featuring 12 new chapters, Gray Hat Hacking: The Ethical Hacker's Handbook, Fourth Edition explains the enemy's current weapons, skills, and tactics and offers field-tested remedies, case studies, and ready-to-deploy testing labs. Find out how hackers gain access, overtake network devices, script and inject malicious code, and plunder Web applications and browsers. Android-based exploits, reverse engineering techniques, and cyber law are thoroughly covered in this state-of-the-art resource. Build and launch spoofing exploits with Ettercap and Evilgrade Induce error conditions and crash software using fuzzers Hack Cisco routers, switches, and network hardware Use advanced reverse engineering to exploit Windows and Linux software Bypass Windows Access Control and memory protection schemes Scan for flaws in Web applications using Fiddler and the x5 plugin Learn the use-after-free technique used in recent zero days Bypass Web authentication via MySQL type conversion and MD5 injection attacks Inject your shellcode into a browser's memory using the latest Heap Spray techniques Hijack Web browsers with Metasploit and the BeEF Injection Framework Neutralize ransomware before it takes control of your desktop Dissect Android malware with JEB and DAD decompilers Find one-day vulnerabilities with binary diffing

Discover the techniques behind beautiful design by deconstructing designs to understand them The term 'hacker' has been redefined to consist of anyone who has an insatiable curiosity as to how things work—and how they can try to make them better. This book is aimed at hackers of all skill levels and explains the classical principles and techniques behind beautiful designs by deconstructing those designs in order to understand what makes them so remarkable. Author and designer David Kadavy provides you with the framework for understanding good design and places a special emphasis on interactive mediums. You'll explore color theory, the role of proportion and geometry in design, and the relationship between medium and form. Packed with unique reverse engineering design examples, this book inspires and encourages you to discover and create new beauty in a variety of formats. Breaks down and studies the classical principles and techniques behind the creation of beautiful design Illustrates cultural and contextual considerations in communicating to a specific audience Discusses why design is important, the purpose of design, the various constraints of design, and how today's fonts are designed with the screen in mind Dissects the elements of color, size, scale, proportion, medium, and form Features a unique range of examples, including the graffiti in the ancient city of Pompeii, the lack of the color black in Monet's art, the style and sleekness of the iPhone, and more By the end of this book, you'll be able to apply the featured design principles to your own web designs, mobile apps, or other digital work.

Describes the security architecture of iOS and offers information on such topics as encryption, jailbreaks, code signing, sandboxing, iPhone fuzzing, and ROP payloads, along with ways to defend iOS devices.

An in-depth look into Mac OS X and iOS kernels Powering Macs, iPhones, iPads and more, OS X and iOS are becoming ubiquitous. When it comes to documentation, however, much of them are shrouded in mystery. Cocoa and Carbon, the application frameworks, are neatly described, but system programmers find the rest lacking. This indispensable guide illuminates the darkest corners of those systems, starting with an architectural overview, then drilling all the way to the core. Provides you with a top down view of OS X and iOS Walks you through the phases of system startup—both Mac (EFI) and mobile (iBoot) Explains how processes, threads, virtual memory, and filesystems are maintained Covers the security architecture Reviews the internal APIs used by the system—BSD and Mach Dissects the kernel, XNU, into its sub components: Mach, the BSD Layer, and I/O kit, and explains each in detail Explains the inner workings of device drivers From architecture to implementation, this book is essential reading if you want to get serious about the internal workings of Mac OS X and iOS.

iOS Hacker's Handbook John Wiley & Sons

This book is intended for mobile security professionals who want to learn how to secure iOS operating systems and its applications. Any knowledge of iOS architecture would be an added advantage.

Penetration testers simulate cyber attacks to find security weaknesses in networks, operating systems, and applications. Information security experts worldwide use penetration techniques to evaluate enterprise defenses. In Penetration Testing, security expert, researcher, and trainer Georgia Weidman introduces you to the core skills and techniques that every pentester needs. Using a virtual machine-based lab that includes Kali Linux and vulnerable operating systems, you'll run through a series of practical lessons with tools like Wireshark, Nmap, and Burp Suite. As you follow along with the labs and launch attacks, you'll experience the key stages of an actual assessment—including information gathering, finding exploitable vulnerabilities, gaining access to systems, post exploitation, and more. Learn how to: –Crack passwords and wireless network keys with brute-forcing and wordlists –Test web applications for vulnerabilities –Use the

Metasploit Framework to launch exploits and write your own Metasploit modules –Automate social-engineering attacks –Bypass antivirus software –Turn access to one machine into total control of the enterprise in the post exploitation phase You'll even explore writing your own exploits. Then it's on to mobile hacking—Weidman's particular area of research—with her tool, the Smartphone Pentest Framework. With its collection of hands-on lessons that cover key tools and strategies, Penetration Testing is the introduction that every aspiring hacker needs.

Secure your iOS applications and uncover hidden vulnerabilities by conducting penetration tests About This Book Achieve your goal to secure iOS devices and applications with the help of this fast paced manual Find vulnerabilities in your iOS applications and fix them with the help of this example-driven guide Acquire the key skills that will easily help you to perform iOS exploitation and forensics with greater confidence and a stronger understanding Who This Book Is For This book is for IT security professionals who want to conduct security testing of applications. This book will give you exposure to diverse tools to perform penetration testing. This book will also appeal to iOS developers who would like to secure their applications, as well as security professionals. It is easy to follow for anyone without experience of iOS pentesting. What You Will Learn Understand the basics of iOS app development, deployment, security architecture, application signing, application sandboxing, and OWASP TOP 10 for mobile Set up your lab for iOS app pentesting and identify sensitive information stored locally Perform traffic analysis of iOS devices and catch sensitive data being leaked by side channels Modify an application's behavior using runtime analysis Analyze an application's binary for security protection Acquire the knowledge required for exploiting iOS devices Learn the basics of iOS forensics In Detail iOS has become one of the most popular mobile operating systems with more than 1.4 million apps available in the iOS App Store. Some security weaknesses in any of these applications or on the system could mean that an attacker can get access to the device and retrieve sensitive information. This book will show you how to conduct a wide range of penetration tests on iOS devices to uncover vulnerabilities and strengthen the system from attacks. Learning iOS Penetration Testing discusses the common vulnerabilities and security-related shortcomings in an iOS application and operating system, and will teach you to conduct static and dynamic analysis of iOS applications. This practical guide will help you uncover vulnerabilities in iOS phones and applications. We begin with basics of iOS security and dig deep to learn about traffic analysis, code analysis, and various other techniques. Later, we discuss the various utilities, and the process of reversing and auditing. Style and approach This fast-paced and practical guide takes a step-by-step approach to penetration testing with the goal of helping you secure your iOS devices and apps quickly.

See your app through a hacker's eyes to find the real sources of vulnerability The Mobile Application Hacker's Handbook is a comprehensive guide to securing all mobile applications by approaching the issue from a hacker's point of view. Heavily practical, this book provides expert guidance toward discovering and exploiting flaws in mobile applications on the iOS, Android, Blackberry, and Windows Phone platforms. You will learn a proven methodology for approaching mobile application assessments, and the techniques used to prevent, disrupt, and remediate the various types of attacks. Coverage includes data storage, cryptography, transport layers, data leakage, injection attacks, runtime manipulation, security controls, and cross-platform apps, with vulnerabilities highlighted and detailed information on the methods hackers use to get around standard security. Mobile applications are widely used in the consumer and enterprise markets to process and/or store sensitive data. There is currently little published on the topic of mobile security, but with over a million apps in the Apple App Store alone, the attack surface is significant. This book helps you secure mobile apps by demonstrating the ways in which hackers exploit weak points and flaws to gain access to data. Understand the ways data can be stored, and how cryptography is defeated Set up an environment for identifying insecurities and the data leakages that arise Develop extensions to bypass security controls and perform injection attacks Learn the different attacks that apply specifically to cross-platform apps IT security breaches have made big headlines, with millions of consumers vulnerable as major corporations come under attack. Learning the tricks of the hacker's trade allows security professionals to lock the app up tight. For better mobile security and less vulnerable data, The Mobile Application Hacker's Handbook is a practical, comprehensive guide.

Discover all the security risks and exploits that can threaten iOS-based mobile devices iOS is Apple's mobile operating system for the iPhone and iPad. With the introduction of iOS5, many security issues have come to light. This book explains and discusses them all. The award-winning author team, experts in Mac and iOS security, examines the vulnerabilities and the internals of iOS to show how attacks can be mitigated. The book explains how the operating system works, its overall security architecture, and the security risks associated with it, as well as exploits, rootkits, and other payloads developed for it. Covers iOS security architecture, vulnerability hunting, exploit writing, and how iOS jailbreaks work Explores iOS enterprise and encryption, code signing and memory protection, sandboxing, iPhone fuzzing, exploitation, ROP payloads, and baseband attacks Also examines kernel debugging and exploitation Companion website includes source code and tools to facilitate your efforts iOS Hacker's Handbook arms you with the tools needed to identify, understand, and foil iOS attacks.

Showing how to analyze a company's vulnerability and how to take a stand on the controversial ethical disclosure issue, this unique resource provides leading-edge technical information being utilized by the top network engineers, security auditors, programmers, and vulnerability assessors. The book provides a practical course of action for those who find themselves in a "disclosure decision" position.

If you're an app developer with a solid foundation in Objective-C, this book is an absolute must—chances are very high that your company's iOS applications are vulnerable to attack. That's because malicious attackers now use an arsenal of tools to reverse-engineer, trace, and manipulate applications in ways that most programmers aren't aware of. This guide illustrates several types of iOS attacks, as well as the tools and techniques that hackers use. You'll learn best practices to help protect your applications, and discover how important it is to understand and strategize like your adversary. Examine subtle vulnerabilities in real-world applications—and avoid the same problems in your apps Learn how attackers infect apps with malware through code injection Discover how attackers defeat iOS keychain and data-protection encryption Use a debugger and custom code injection to manipulate the runtime Objective-C environment Prevent attackers from hijacking SSL sessions and stealing traffic Securely delete files and design your apps to prevent forensic data leakage Avoid debugging abuse, validate the integrity of run-time classes, and make your code harder to trace

Uses real-world bug reports (vulnerabilities in software or in this case web applications) to teach programmers and InfoSec professionals how to discover and protect vulnerabilities in web applications. Real-World Bug Hunting is a field guide to finding software bugs. Ethical hacker Peter Yaworski breaks down common types of bugs, then contextualizes them with real bug

bounty reports released by hackers on companies like Twitter, Facebook, Google, Uber, and Starbucks. As you read each report, you'll gain deeper insight into how the vulnerabilities work and how you might find similar ones. Each chapter begins with an explanation of a vulnerability type, then moves into a series of real bug bounty reports that show how the bugs were found. You'll learn things like how Cross-Site Request Forgery tricks users into unknowingly submitting information to websites they are logged into; how to pass along unsafe JavaScript to execute Cross-Site Scripting; how to access another user's data via Insecure Direct Object References; how to trick websites into disclosing information with Server Side Request Forgeries; and how bugs in application logic can lead to pretty serious vulnerabilities. Yaworski also shares advice on how to write effective vulnerability reports and develop relationships with bug bounty programs, as well as recommends hacking tools that can make the job a little easier.

There are more than one billion Android devices in use today, each one a potential target. Unfortunately, many fundamental Android security features have been little more than a black box to all but the most elite security professionals—until now. In *Android Security Internals*, top Android security expert Nikolay Elenkov takes us under the hood of the Android security system. Elenkov describes Android security architecture from the bottom up, delving into the implementation of major security-related components and subsystems, like Binder IPC, permissions, cryptographic providers, and device administration. You'll learn: –How Android permissions are declared, used, and enforced –How Android manages application packages and employs code signing to verify their authenticity –How Android implements the Java Cryptography Architecture (JCA) and Java Secure Socket Extension (JSSE) frameworks –About Android's credential storage system and APIs, which let applications store cryptographic keys securely –About the online account management framework and how Google accounts integrate with Android –About the implementation of verified boot, disk encryption, lockscreen, and other device security features –How Android's bootloader and recovery OS are used to perform full system updates, and how to obtain root access With its unprecedented level of depth and detail, *Android Security Internals* is a must-have for any security-minded Android developer.

Seven Deadliest Wireless Technologies Attacks provides a comprehensive view of the seven different attacks against popular wireless protocols and systems. This book pinpoints the most dangerous hacks and exploits specific to wireless technologies, laying out the anatomy of these attacks, including how to make your system more secure. You will discover the best ways to defend against these vicious hacks with step-by-step instruction and learn techniques to make your computer and network impenetrable. Each chapter includes an example real attack scenario, an analysis of the attack, and methods for mitigating the attack. Common themes will emerge throughout the book, but each wireless technology has its own unique quirks that make it useful to attackers in different ways, making understanding all of them important to overall security as rarely is just one wireless technology in use at a home or office. The book contains seven chapters that cover the following: infrastructure attacks, client attacks, Bluetooth attacks, RFID attacks; and attacks on analog wireless devices, cell phones, PDAs, and other hybrid devices. A chapter deals with the problem of bad encryption. It demonstrates how something that was supposed to protect communications can end up providing less security than advertised.

This book is intended for information security professionals of all levels, as well as wireless device developers and recreational hackers. Attacks detailed in this book include: 802.11 Wireless—Infrastructure Attacks 802.11 Wireless—Client Attacks Bluetooth Attacks RFID Attacks Analog Wireless Device Attacks Bad Encryption Attacks on Cell Phones, PDAs and Other Hybrid Devices

The Hardware Hacking Handbook takes you deep inside embedded devices to show how different kinds of attacks work, then guides you through each hack on real hardware. Embedded devices are chip-size microcomputers small enough to be included in the structure of the object they control, and they're everywhere—in phones, cars, credit cards, laptops, medical equipment, even critical infrastructure. This means understanding their security is critical. *The Hardware Hacking Handbook* takes you deep inside different types of embedded systems, revealing the designs, components, security limits, and reverse-engineering challenges you need to know for executing effective hardware attacks. Written with wit and infused with hands-on lab experiments, this handbook puts you in the role of an attacker interested in breaking security to do good. Starting with a crash course on the architecture of embedded devices, threat modeling, and attack trees, you'll go on to explore hardware interfaces, ports and communication protocols, electrical signaling, tips for analyzing firmware images, and more. Along the way, you'll use a home testing lab to perform fault-injection, side-channel (SCA), and simple and differential power analysis (SPA/DPA) attacks on a variety of real devices, such as a crypto wallet. The authors also share insights into real-life attacks on embedded systems, including Sony's PlayStation 3, the Xbox 360, and Philips Hue lights, and provide an appendix of the equipment needed for your hardware hacking lab – like a multimeter and an oscilloscope – with options for every type of budget. You'll learn: • How to model security threats, using attacker profiles, assets, objectives, and countermeasures • Electrical basics that will help you understand communication interfaces, signaling, and measurement • How to identify injection points for executing clock, voltage, electromagnetic, laser, and body-biasing fault attacks, as well as practical injection tips • How to use timing and power analysis attacks to extract passwords and cryptographic keys • Techniques for leveling up both simple and differential power analysis, from practical measurement tips to filtering, processing, and visualization Whether you're an industry engineer tasked with understanding these attacks, a student starting out in the field, or an electronics hobbyist curious about replicating existing work, *The Hardware Hacking Handbook* is an indispensable resource – one you'll always want to have onhand.

Provides a brief history of computer hacking and includes information about computer security and how to guard against computer hackers.

Learn how to use Profile Manager, a feature included in OS X Lion Server, to configure and remotely manage iOS devices (including iPad, iPhone, and iPod touch) and Macs running Lion. With this eBook, you will learn how to use Profile Manager's web-based tools to configure user settings for services such as Mail, Calendar, VPN, and Wi-Fi; define passcode settings to prevent unauthorized access to data stored on your users' devices; and remotely wipe devices if they go missing. The Profile Manager uses the Apple Push Notification Service (APNS), so you can immediately push configuration changes to your devices, as long as they have some kind of network connectivity. Why do all the work yourself? Show your users how easy it is for them to use the self-service web portal to download and install the configuration profiles you've carefully crafted for them, and how to remotely lock or wipe their own devices without your intervention. This eBook includes the knowledge you need to configure your Lion Server to be an Open Directory master, use an appropriate SSL certificate, provide Profile Manager services, and perform basic troubleshooting.

Take a practitioner's approach in analyzing the Internet of Things (IoT) devices and the security issues facing an IoT architecture. You'll review the architecture's central components, from hardware communication interfaces, such as UART and SPI, to radio protocols, such as BLE or ZigBee. You'll also learn to assess a device physically by opening it, looking at the PCB, and identifying the chipsets and interfaces. You'll then use that information to gain entry to the device or to perform other actions, such as dumping encryption keys and firmware. As the IoT rises to one of the most popular tech trends, manufacturers need to take necessary steps to secure devices and protect them from attackers. The IoT Hacker's Handbook breaks down the Internet of Things, exploits it, and reveals how these devices can be built securely. What You'll Learn Perform a threat model of a real-world IoT device and locate all possible attacker entry points Use reverse engineering of firmware binaries to identify security issues Analyze, assess, and identify security issues in exploited ARM and MIPS based binaries Sniff, capture, and exploit radio communication protocols, such as Bluetooth Low Energy (BLE), and ZigBee Who This Book is For Those interested in learning about IoT security, such as pentesters working in different domains, embedded device developers, or IT people wanting to move to an Internet of Things security role.

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