

Database Sys: Practl Apprch Desgn Implemntn: A Practical Approach To Design, Implementation And Management (International Computer Science Series)

Offers real world examples of computer security breeches and discusses common attacks, security policies, configuration and hardware preparation, and system scanning and repair.

Large-scale open distributed systems provide an infrastructure for assembling global applications on the basis of software and hardware components originating from multiple sources. Open systems rely on publicly available standards to permit heterogeneous components to interact. The Internet is the archetype of a large-scale open distributed system; standards such as HTTP, HTML, and XML, together with the widespread adoption of the Java language, are the cornerstones of many distributed systems. This book surveys security in large-scale open distributed systems by presenting several classic papers and a variety of carefully reviewed contributions giving the results of new research and development. Part I provides background requirements and deals with fundamental issues in trust, programming, and mobile computations in large-scale open distributed systems. Part II contains descriptions of general concepts, and Part III presents papers detailing implementations of security concepts.

This book constitutes the refereed proceedings of the 28th IFIP TC 11 International Information Security and Privacy Conference, SEC 2013, held in Auckland, New Zealand, in July 2013. The 31 revised full papers presented were carefully reviewed and selected from 83 submissions. The papers are organized in topical sections on malware, authentication and authorization, network security/cryptography, software security, policy compliance and obligations, privacy protection, risk analysis and security metrics, social engineering, and security management/forensics.

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.

6th International Symposium, RAID 2003, Pittsburgh, PA, USA, September 8-10, 2003, Proceedings

PThreads Programming

Solaris 10 and OpenSolaris Kernel Architecture

28th IFIP TC 11 International Conference, SEC 2013, Auckland, New Zealand, July 8-10, 2013, Proceedings

Detection of Intrusions and Malware, and Vulnerability Assessment

Textbook

Secure Internet Programming

Volume 3 of the PoC || GTFO collection--read as Proof of Concept or Get the Fuck Out--continues the series of wildly popular collections of this hacker journal. Contributions range from humorous poems to deeply technical essays bound in the form of a bible. The International Journal of Proof-of-Concept or Get The Fuck Out is a celebrated collection of short essays on computer security, reverse engineering and retrocomputing topics by many of the world's most famous hackers. This third volume contains all articles from releases 14 to 18 in the form of an actual, bound bible. Topics include how to dump the ROM from one of the most secure Sega Genesis games ever created; how to create a PDF that is also a Git repository; how to extract the Game Boy Advance BIOS ROM; how to sniff Bluetooth Low Energy communications with the BCC Micro:Bit; how to conceal ZIP Files in NES Cartridges; how to remotely exploit a TetriNET Server; and more. The journal exists to remind us of what a clever engineer can build from a box of parts and a bit of free time. Not to showcase what others have done, but to explain how they did it so that readers can do these and other clever things themselves.

This Festschrift has been put together on the occasion of Franz Baader's 60th birthday to celebrate his fundamental and highly influential scientific contributions. The 30 papers in this volume cover several scientific areas that Franz Baader has been working on during the last three decades, including description logics, term rewriting, and the combination of decision procedures. We hope that readers will enjoy the articles gathered in Franz's honour and appreciate the breadth and depth of his favourite areas of computer science.

This book constitutes the refereed proceedings of the 6th International Symposium on Recent Advances in Intrusion Detection, RAID 2003, held in Pittsburgh, PA, USA in September 2003. The 13 revised full papers presented were carefully reviewed and selected from 44 submissions. The papers are organized in topical sections on network infrastructure, anomaly detection, modeling and specification, and IDS sensors.

Embedded Android is for Developers wanting to create embedded systems based on Android and for those wanting to port Android to new hardware, or creating a custom development environment. Hackers and moders will also find this an indispensible guide to how Android works.

Operating Systems for Supercomputers and High Performance Computing

A Practitioner's Guide to Optimizing Response Time

Essays Dedicated to Franz Baader on the Occasion of His 60th Birthday

Proceedings of ICRIC 2020

Successful IoT Device/Edge and Platform Security Deployment

A Top-down Approach for X86 and PowerPC Architectures

Understanding the Linux Virtual Memory Manager

This book provides an introduction to data science and offers a practical overview of the concepts and techniques that readers need to get the most out of their large-scale data mining projects and research studies. It discusses data-analytical thinking, which is essential to extract useful knowledge and obtain commercial value from the data. Also known as data-driven science, soft computing and data mining disciplines cover a broad interdisciplinary range of scientific methods and processes. The book provides readers with sufficient knowledge to tackle a wide range of issues in complex systems, bringing together the scopes that integrate soft computing and data mining in various combinations of applications and practices, since to thrive in these data-driven ecosystems, researchers, data analysts and practitioners must understand the design choice and options of these approaches. This book helps readers to solve complex benchmark problems and to better appreciate the concepts, tools and techniques used.

The aim of this book is to provide a practical introduction to the foundations of modern operating systems, with a particular focus on GNU/Linux and the Arm platform. The unique perspective of the authors is that they explain operating systems theory and concepts but also ground them in practical use through illustrative examples.

This course-tested textbook describes the design and implementation of operating systems, and applies it to the MTX operating system, a Unix-like system designed for Intel x86 based PCs. Written in an evolutionary style, theoretical and practical aspects of operating systems are presented as the design and implementation of a complete operating system is demonstrated. Throughout the text, complete source code and working sample systems are used to exhibit the techniques discussed. The book contains many new materials on the design and use of parallel algorithms in SMP. Complete coverage on booting an operating system is included, as well as, extending the process model to implement threads support in the MTX kernel, an init program for system startup and a sh program for executing user commands. Intended for technically oriented operating systems courses that emphasize both theory and practice, the book is also suitable for self-study.

GNU Parallel is a UNIX shell tool for running jobs in parallel. Learn how to use GNU Parallel from the developer of GNU Parallel.

UNIX Systems Programming

Solaris Internals

The Design of the UNIX Operating System

Recent Advances in Intrusion Detection

The GNU Source-level Debugger

Description Logic, Theory Combination, and All That

Second EAI International Conference, Industrial IoT 2017, Wuhu, China, March 25–26, 2017, Proceedings

An in-depth exploration of the inner-workings of Android: In Volume I, we take the perspective of the Power User as we delve into the foundations of Android, filesystems, partitions, boot process, native daemons and services.

This book features selected papers presented at the 3rd International Conference on Recent Innovations in Computing (ICRIC 2020), held on 20–21 March 2020 at the Central University of Jammu, India, and organized by the university's Department of Computer Science & Information Technology. It includes the latest research in the areas of software engineering, cloud computing, computer network information security, database and distributed computing, and digital India.

Few works are as timely and critical to the advancement of high performance computing than is this new up-to-date treatise on leading-edge directions of operating systems. It is a first-hand product of many of the leaders in this rapidly evolving field and possibly the most comprehensive. This new and important book masterfully presents the major alternative concepts driving the future of operating systems. It describes the major advances of monolithic operating systems such as Linux and Unix that dominate the TOP500 list. It also presents the state of the art in lightweight kernels that exhibit high efficiency and scalability at the loss of generality. Finally, this work looks forward to possibly the most promising strategy of a hybrid structure combining full service functionality with lightweight kernels on the shelves of almost everyone who is in any way engaged in the multi-discipline of high performance computing. (From the foreword by Thomas Sterling)

This highly anticipated print collection gathers articles published in the much-loved International Journal of Proof-of-Concept or Get The Fuck Out. PoC||GTFO follows in the tradition of Phrack and Uninformed by publishing on the subjects of offensive security research, reverse engineering, and file format internals. Until now, the journal has only been available online or printed and distributed for free. In this book's quirky, biblical style, this book comes with all the trimmings: a leatherette cover, ribbon bookmark, bible paper, and gilt-edged pages. The book features more than 80 technical essays from numerous famous hackers, authors of classics like "Reliable Code Execution on a Tamagotchi," "ELFs are Dorky, Elves are Cool," "Burning a Phone," "Forget Not the Humble Timing Attack," and "A Sermon on the Mount for the Information Security Professional" by Ange Albertini illustrate many of the clever tricks described in the text.

Real World Linux Security

Proceedings of the Fourth International Conference on Soft Computing and Data Mining (SCDM 2020), Melaka, Malaysia, January 22–23, 2020

Writing Secure Code

11th International Symposium, FroCoS 2017, Brasilia, Brazil, September 27-29, 2017, Proceedings

Debugging with GDB

Operating Systems Foundations with Linux on the Raspberry Pi

Systems Programming in Unix/LinuxSpringer

Covering all the essential components of Unix/Linux, including process management, concurrent programming, timer and time service, file systems and network programming, this textbook emphasizes programming practice in the Unix/Linux environment. Systems Programming in Unix/Linux is intended as a textbook for systems programming courses in technically-oriented Computer Science/Engineering curricula that emphasize both theory and programming practice. The book contains many detailed working example programs with complete source code. It is also suitable for self-study by advanced programmers and computer enthusiasts. Systems programming is an indispensable part of Computer Science/Engineering education. After taking an introductory programming course, this book is meant to further knowledge by detailing how dynamic data structures are used in practice, using programming exercises and programming projects on such topics as C structures, pointers, link lists and trees. This book provides a wide range of knowledge about computer systemsoftware and advanced programming skills, allowing readers to interface with operatingsystem kernel, make efficient use of system resources and develop application software.It also prepares readers with the needed background to pursue advanced studies inComputer Science/Engineering, such as operating systems, embedded systems, databasesystems, data mining, artificial intelligence, computer networks, network security,distributed and parallel computing.

This book presents high-quality, original contributions (both theoretical and experimental) on software engineering, cloud computing, computer networks & internet technologies, artificial intelligence, information security, and database and distributed computing. It gathers papers presented at ICRIC 2019, the 2nd International Conference on Recent Innovations in Computing, which was held in Jammu, India, in March 2019. This conference series represents a targeted response to the growing need for research that reports on and assesses the practical implications of IoT and network technologies, AI and machine learning, cloud-based e-Learning and big data, security and privacy, image processing and computer vision, and next-generation computing technologies.

The revision of the definitive guide to Unix system programming is now available in a more portable format.

Design and Implementation of the MTX Operating System

16th International Conference, DIMVA 2019, Gothenburg, Sweden, June 19–20, 2019, Proceedings

Android Security Internals

Documentation Writing for System Administrators

An In-Depth Guide to Android's Security Architecture

GA27-3678-04

Installation guide

Offers a comprehensive view of the underpinnings of the Linux kernel on the Intel x86 and the Power PC.

This book constitutes the thoroughly refereed post-conference proceedings of the Second International Conference on Industrial IoT Technologies and Applications, IoT 2017, held in Wuhu, China, in March 2017. The volume contains 25 papers carefully reviewed and selected from 41 submissions focusing on topics such as big data, cloud computing, Internet of things, areas of control, mobile computing, and security.

Get into the hacker's mind--and outsmart him! Fully updated for the latest threats, tools, and countermeasures Systematically covers proactive, reactive, and preemptive security measures Detailed, step-by-step techniques for protecting HP-UX, Linux, and UNIX systems "Takes on even more meaning now than the original edition!" --Denny Georg, CTO, Information Technology, Hewlett-Packard Secure your systems against today's attacks--and tomorrow's. Halting the Hacker: A Practical Guide to Computer Security, Second Edition combines unique insight into the mind of the hacker with practical, step-by-step countermeasures for protecting any HP-UX, Linux, or UNIX system. Top Hewlett-Packard security architect Donald L. Pipkin has updated this global bestseller for today's most critical threats, tools, and responses. Pipkin organizes this book around the processes hackers use to gain access, privileges, and control--showing you exactly how they work and the best ways to respond. Best of all, Pipkin doesn't just tell you what to do, but why. Using dozens of new examples, he gives you the skills and mindset to protect yourself against any current exploit--and attacks that haven't even been imagined yet. How hackers select targets, identify systems, gather information, gain access, acquire privileges, and avoid detection How multiple subsystems can be used in harmony to attack your computers and networks Specific steps you can take immediately to improve the security of any HP-UX, Linux, or UNIX system How to build a secure UNIX system from scratch--with specifics for HP-UX and Red Hat Linux Systematic proactive, reactive, and preemptive security measures Security testing, ongoing monitoring, incident response, and recovery--in depth Legal recourse: What laws are being broken, what you need to prosecute, and how to overcome the obstacles to successful prosecution About the CD-ROM The accompanying CD-ROM contains an extensive library of HP-UX and Linux software tools for detecting and eliminating security problems and a comprehensive information archive on security-related topics.

This book constitutes the refereed proceedings of the 14th International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment, DIMVA 2017, held in Bonn, Germany, in July 2017. The 18 revised full papers included in this book were carefully reviewed and selected from 67 submissions. They present topics such as enclaves and isolation; malware analysis; cyber-physical systems; detection and protection; code analysis; and web security.

The Linux Kernel Primer

Intrusion Prevention, Detection, and Recovery
Demystifying Internet of Things Security
Communication, Concurrency, and Threads
Security and Privacy Protection in Information Processing Systems
Frontiers of Combining Systems
History of Cryptography and Cryptanalysis

With threads programming, multiple tasks run concurrently within the same program. They can share a single CPU as processes do or take advantage of multiple CPUs when available. They provide a clean way to divide the tasks of a program while sharing data.

This is an expert guide to the 2.6 Linux Kernel's most important component: the Virtual Memory Manager.

This book constitutes the proceedings of the 16th International Conference on Detection of Intrusions and Malware, and Vulnerability Assessment, DIMVA 2019, held in Gothenburg, Sweden, in June 2019. The 23 full papers presented in this volume were carefully reviewed and selected from 80 submissions. The contributions were organized in topical sections named: wild wild web; cyber-physical systems; malware; software security and binary analysis; network security; and attack mitigation.

Break down the misconceptions of the Internet of Things by examining the different security building blocks available in Intel Architecture (IA) based IoT platforms. This open access book reviews the threat pyramid, secure boot, chain of trust, and the SW stack leading up to defense-in-depth. The IoT presents unique challenges in implementing security and Intel has both CPU and Isolated Security Engine capabilities to simplify it. This book explores the challenges to secure these devices to make them immune to different threats originating from within and outside the network. The requirements and robustness rules to protect the assets vary greatly and there is no single blanket solution approach to implement security. Demystifying Internet of Things Security provides clarity to industry professionals and provides an overview of different security solutions What You'll Learn Secure devices, immunizing them against different threats originating from inside and outside the networkGather an overview of the different security building blocks available in Intel Architecture (IA) based IoT platformsUnderstand the threat pyramid, secure boot, chain of trust, and the software stack leading up to defense-in-depth Who This Book Is For Strategists, developers, architects, and managers in the embedded and Internet of Things (IoT) space trying to understand and implement the security in the IoT devices/platforms.

14th International Conference, DIMVA 2017, Bonn, Germany, July 6-7, 2017, Proceedings

Optimizing Oracle Performance

Recent Advances on Soft Computing and Data Mining

Codes, Ciphers, and Their Algorithms

Advanced Programming in the UNIX Environment

Android Internals - Volume I

GNU Parallel 2018

Oracle system performance inefficiencies often go undetected for months or even years--even under intense scrutiny--because traditional Oracle performance analysis methods and tools are fundamentally flawed. They're unreliable and inefficient.Oracle DBAs and developers are all too familiar with the outlay of time and resources, blown budgets, missed deadlines, and marginally effective performance fiddling that is commonplace with traditional methods of Oracle performance tuning. In this crucial book, Cary Millsap, former VP of Oracle's System Performance Group, clearly and concisely explains how to use Oracle's response time statistics to diagnose and repair performance problems. Cary also shows how "queueing theory" can be applied to response time statistics to predict the impact of upgrades and other system changes.Optimizing Oracle Performance eliminates the time-consuming, trial-and-error guesswork inherent in most conventional approaches to tuning. You can determine exactly where a system's performance problem is, and with equal importance, where it is not, in just a few minutes--even if the problem is several years old.Optimizing Oracle Performance cuts a path through the complexity of current tuning methods, and streamlines an approach that focuses on optimization techniques that any DBA can use quickly and successfully to make noticeable--even dramatic--improvements.For example, the one thing database users care most about is response time. Naturally, DBAs focus much of their time and effort towards improving response time. But it is entirely too easy to spend hundreds of hours to improve important system metrics such as hit ratios, average latencies, and wait times, only to find users are unable to perceive the difference. And an expensive hardware upgrade may not help either.It doesn't have to be that way. Technological advances have added impact, efficiency, measurability, predictive capacity, reliability, speed, and practicality to the science of Oracle performance optimization. Optimizing Oracle Performance shows you how to slash the frustration and expense associated with unraveling the true root cause of any type of performance problem, and reliably predict future performance.The price of this essential book will be paid back in hours saved the first time its methods are used.

The Complete Guide to Optimizing Systems Performance Written by the winner of the 2013 LISA Award for Outstanding Achievement in System Administration Large-scale enterprise, cloud, and virtualized computing systems have introduced serious performance challenges. Now, internationally renowned performance expert Brendan Gregg has brought together proven methodologies, tools, and metrics for analyzing and tuning even the most complex environments. Systems Performance: Enterprise and the Cloud focuses on Linux® and Unix® performance, while illuminating performance issues that are relevant to all operating systems. You'll gain deep insight into how systems work and perform, and learn methodologies for analyzing and improving system and application performance. Gregg presents examples from bare-metal systems and virtualized cloud tenants running Linux-based Ubuntu®, Fedora®, CentOS, and the illumos-based Joyent® SmartOS™ and OmniTI OmniOS®. He systematically covers modern systems performance, including the “traditional” analysis of CPUs, memory, disks, and networks, and new areas including cloud computing and dynamic tracing. This book also helps you identify and fix the “unknown unknowns” of complex performance: bottlenecks that emerge from elements and interactions you were not aware of. The text concludes with a detailed case study, showing how a real cloud customer issue was analyzed from start to finish. Coverage includes • Modern performance analysis and tuning: terminology, concepts, models, methods, and techniques • Dynamic tracing techniques and tools, including examples of DTrace, SystemTap, and perf • Kernel internals: uncovering what the OS is doing • Using system observability tools, interfaces, and frameworks • Understanding and monitoring application performance • Optimizing CPUs: processors, cores, hardware threads, caches, interconnects, and kernel scheduling • Memory optimization: virtual memory, paging, swapping, memory architectures, busses, address spaces, and allocators • File system I/O, including caching • Storage devices/controllers, disk I/O workloads, RAID, and kernel I/O • Network-related performance issues: protocols, sockets, interfaces, and physical connections • Performance implications of OS and hardware-based virtualization, and new issues encountered with cloud computing • Benchmarking: getting accurate results and avoiding common mistakes This guide is indispensable for anyone who operates enterprise or cloud environments: system, network, database, and web admins; developers; and other professionals. For students and others new to optimization, it also provides exercises reflecting Gregg's extensive instructional experience.

"The Solaris™ Internals volumes are simply the best and most comprehensive treatment of the Solaris (and OpenSolaris) Operating Environment. Any person using Solaris--in any capacity--would be remiss not to include these two new volumes in their personal library. With advanced observability tools in Solaris (LikeDTrace), you will more often find yourself in what was previously unchartable territory. Solaris™ Internals, Second Edition, provides us a fantastic means to be able to quickly understand these systems and further explore the Solaris architecture--especially when coupled with OpenSolaris source availability."

--Jarod Jenson, chief systems architect, Aeysis "The Solaris™ Internals volumes by Jim Mauro and Richard McDougall must be on your bookshelf if you are interested in in-depth knowledge of Solaris operating system internals and architecture. As a senior Unix engineer for many years, I found the first edition of Solaris™ Internals the only fully comprehensive source for kernel developers, systems programmers, and systems administrators. The new second edition, with the companion performance and debugging book, is an indispensable reference set, containing many useful and practical explanations of Solaris and its underlying subsystems, including tools and methods for observing and analyzing any system running Solaris 10 or OpenSolaris." --Marc Strahl, senior UNIX engineer Solaris™ Internals, Second Edition, describes the algorithms and data structures of all the major subsystems in the Solaris 10 and OpenSolaris kernels. The text has been extensively revised since the first edition, with more than 600 pages of new material. Integrated Solaris tools and utilities, including DTrace, MDB, kstat, and the process tools, are used throughout to illustrate how the reader can observe the Solaris kernel in action. The companion volume, Solaris™ Performance and Tools, extends the examples contained here, and expands the scope to performance and behavior analysis. Coverage includes: Virtual and physical memory Processes, threads, and scheduling File system framework and UFS implementation Networking: TCP/IP implementation Resource management facilities and zones The Solaris™ Internals volumes make a superb reference for anyone using Solaris 10 and OpenSolaris.

Enhance Linux security, application platforms, and virtualization solutions with SELinux to work within your boundaries, your rules, and your policiesKey Features Learn what SELinux is, and how it acts as a mandatory access control system on Linux* Apply and tune SELinux enforcement to users, applications, platforms, and virtualization solutions* Use real-life examples and custom policies to strengthen the security posture of your systemsBook DescriptionLinux is a dominant player in many organizations and in the cloud. Securing the Linux environment is extremely important for any organization, and Security-Enhanced Linux (SELinux) acts as an additional layer to Linux system security.SELinux System Administration covers basic SELinux concepts and shows you how to enhance Linux system protection measures. You will get to grips with SELinux and understand how it is integrated. As you progress, you'll get hands-on experience of tuning and configuring SELinux and integrating it into day-to-day administration tasks such as user management, network management, and application maintenance. Platforms such as Kubernetes, system services like systemd, and virtualization solutions like libvirt and Xen, all of which offer SELinux-specific controls, will be explained effectively so that you understand how to apply and configure SELinux within these applications. If applications do not exert the expected behavior, you'll learn how to fine-tune policies to securely host these applications. In case no policies exist, the book will guide you through developing custom policies on your own.By the end of this Linux book, you'll be able to harden any Linux system using SELinux to suit your needs and fine-tune existing policies and develop custom ones to protect any app and service running on your Linux systems.What you will learn* Understand what SELinux is and how it is integrated into Linux* Tune Linux security using policies and their configurable settings* Manage Linux users with least-privilege roles and access controls* Use SELinux controls in system services and virtualization solutions* Analyze SELinux behavior through log events and policy analysis tools* Protect systems against unexpected and malicious behavior* Enhance existing policies or develop custom onesWho this book is forThis Linux sysadmin book is for Linux administrators who want to control the secure state of their systems using SELinux, and for security professionals who have experience in maintaining a Linux system and want to know about SELinux. Experience in maintaining Linux systems, covering user management, software installation and maintenance, Linux security controls, and network configuration is required to get the most out of this book.*

A Confectioner's Cookbook

Porting, Extending, and Customizing

Industrial IoT Technologies and Applications

Systems Programming in Unix/Linux

SELinux System Administration - Third Edition

Security Issues for Mobile and Distributed Objects

Enterprise and the Cloud

bull: Learn UNIX essentials with a concentration on communication, concurrency, and multithreading techniques bull: Full of ideas on how to design and implement good software along with unique projects throughout bull: Excellent companion to Stevens' Advanced UNIX System Programming

This book describes the internal algorithms and the structures that form the basis of the UNIX operating system and their relationship to the programmer interface. The system description is based on UNIX System V Release 2 supported by AT&T, with some features from Release 3.

Covers topics such as the importance of secure systems, threat modeling, canonical representation issues, solving database input, denial-of-service attacks, and security code reviews and checklists.

?This book is focused on the use of deep learning (DL) and artificial intelligence (AI) as tools to advance the fields of malware detection and analysis. The individual chapters of the book deal with a wide variety of state-of-the-art AI and DL techniques, which are applied to a number of challenging malware-related problems. DL and AI based detection and analysis are largely data driven and hence minimal expert domain knowledge of malware is needed. This book fills a gap between the emerging fields of DL/AI and malware analysis. It covers a broad range of modern and practical DL and AI techniques, including frameworks and development tools enabling the audience to innovate research advancements in a multitude of malware (and closely related) use cases.

PoC or GTF0

Embedded Android

Halting the Hacker

Systems Performance

Proceedings of ICRIC 2019

Malware Analysis Using Artificial Intelligence and Deep Learning

Recent Innovations in Computing

This accessible textbook presents a fascinating review of cryptography and cryptanalysis across history. The text relates the earliest use of the monoalphabetic cipher in the ancient world, the development of the “unbreakable” Vigenère cipher, and an account of how cryptology entered the arsenal of military intelligence during the American Revolutionary War. Moving on to the American Civil War, the book explains how the Union solved the Vigenère ciphers used by the Confederates, before investigating the development of cipher machines throughout World War I and II. This is then followed by an exploration of cryptology in the computer age, from public-key cryptography and web security, to criminal cyber-attacks and cyber-warfare. Looking to the future, the role of cryptography in the Internet of Things is also discussed, along with the potential impact of quantum computing. Topics and features: presents a history of cryptology from ancient Rome to the present day, with a focus on cryptology in the 20th and 21st centuries; reviews the different types of cryptographic algorithms used to create secret messages, and the various methods for breaking such secret messages; provides engaging examples throughout the book illustrating the use of cryptographic algorithms in different historical periods; describes the notable contributions to cryptology of Herbert Yardley, William and Elizebeth Smith Friedman, Lester Hill, Agnes Meyer Driscoll, and Claude Shannon; concludes with a review of tantalizing unsolved mysteries in cryptology, such as the Voynich Manuscript, the Beale Ciphers, and the Kryptos sculpture. This engaging work is ideal as both a primary text for courses on the history of cryptology, and as a supplementary text for advanced undergraduate courses on computer security. No prior background in mathematics is assumed, beyond what would be encountered in an introductory course on discrete mathematics.

A POSIX Standard for Better Multiprocessing

A Practical Guide to Computer Security

PoC or GTF0, Volume 3

Implement Mandatory Access Control to Secure Applications, Users, and Information Flows on Linux