The Art Of Software Security Assessment Identifying And Avoiding Vulnerabilities Mark Dowd

Eventually, you will certainly discover a extra experience and finishing by spending more cash. nevertheless when? complete you tolerate that you require to acquire those every needs similar to having significantly cash? Why dont you try to acquire something basic in the beginning? Thats something that will guide you to understand even more on the subject of the globe, experience, some places, next history, amusement, and a lot more?

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Agile Processes in Software Engineering and Extreme Programming - Hubert Baumeister 2017-04-12
This book is open access under a CC BY license. The volume constitutes the proceedings of the 18th International Conference on Agile Software Development, XP 2017, held in Cologne, Germany, in May 2017. The 14 full and 6 short papers presented in this volume were carefully reviewed and selected from 46 submissions. They were organized in topical sections named: improving agile processes; agile in organization; and safety critical software. In addition, the volume contains 3 doctoral symposium papers (from 4 papers submitted).
Network and System Security - Javier Lopez 2013-05-17
This book constitutes the proceedings of the 7th International Conference on Network and System Security, NSS 2013, held in Madrid, Spain, in June 2013. The 41 full papers presented were carefully reviewed and selected from 176 submissions. The volume also includes 7 short papers and 13 industrial track papers. The paper are organized in topical sections on network security (including: modeling and evaluation; security protocols and practice; network attacks and defense) and system security (including: malware and intrusions; applications security; security algorithms and systems; cryptographic algorithms; privacy; key agreement and distribution).
Fundamentals of Software Architecture - Mark Richards 2020-01-28
Salary surveys worldwide regularly place software architect in the top 10 best jobs, yet no real guide exists to help developers become architects. Until now. This book provides the first comprehensive overview of software architecture’s many aspects. Aspiring and existing architects alike will examine architectural characteristics, architectural patterns, component determination, diagramming and presenting architecture, evolutionary architecture, and many other topics. Mark Richards and Neal Ford—hands-on practitioners who have taught software architecture classes professionally for years—focus on architecture principles that apply across all technology stacks. You’ll explore software architecture in a modern light, taking into account all the innovations of the past decade. This book examines: Architecture patterns: The technical basis for many architectural decisions Components: Identification, coupling, cohesion, partitioning, and granularity Soft skills: Effective team management, meetings, negotiation, presentations, and more Modernity: Engineering practices and operational approaches that have changed radically in the past few years Architecture as an engineering discipline: Repeatable results, metrics, and concrete valuations that add rigor to software architecture
Getting Things Done - David Allen 2001
ALLEN/GETTING THINGS DONE
The Art of Software Security Assessment - Mark Dowd 2006-11-20
The Definitive Insider’s Guide to Auditing Software Security This is one of the most detailed, sophisticated, and useful guides to software security auditing ever written. The authors are leading security consultants and researchers who have personally uncovered vulnerabilities in applications ranging from sendmail to Microsoft Exchange, Check Point VPN to Internet Explorer. Drawing on their extraordinary experience, they introduce a start-to-finish methodology for “ripping apart” applications to reveal even the most subtle and well-hidden security flaws. The Art of Software Security Assessment covers the full spectrum of software vulnerabilities in both UNIX/Linux and Windows environments. It demonstrates how to audit security in applications of all sizes and functions, including network and Web software. Moreover, it teaches using extensive examples of real code drawn from past flaws in many of the industry's highest-profile applications. Coverage includes • Code auditing: theory, practice, proven methodologies, and secrets of the trade • Bridging the gap between secure software design and post-implementation review • Performing architectural assessment: design review, threat modeling, and operational review • Identifying vulnerabilities related to memory management, data types, and malformed data • UNIX/Linux assessment: privileges, files, and processes • Windows-specific issues, including objects and the filesystem • Auditing interprocess communication, synchronization, and state • Evaluating network software: IP stacks, firewalls, and common application protocols • Auditing Web applications and technologies
Threat Modeling - Izar Tarandach 2020-11-13
Threat modeling is one of the most essential--and most misunderstood--parts of the development lifecycle. Whether you're a security practitioner or a member of a development team, this book will help you gain a better understanding of how you can apply core threat modeling concepts to your practice to protect your systems against threats. Contrary to popular belief, threat modeling doesn't require advanced security knowledge to initiate or a Herculean effort to sustain. But it is critical for spotting and addressing potential concerns in a cost-effective way before the code's written--and before it's too late to find a solution. Authors Izar Tarandach and Matthew Coles walk you through various ways to approach and execute threat modeling in your organization. Explore fundamental properties and mechanisms for securing data and system functionality Understand the relationship between security, privacy, and safety Identify key characteristics for assessing system security Get an in-depth review of popular and specialized techniques for modeling and analyzing your systems View the future of threat modeling and Agile development methodologies, including DevOps automation Find answers to frequently asked questions, including how to avoid common threat modeling pitfalls
The Behavioral and Social Sciences - National Research Council 1988-02-01
This volume explores the scientific frontiers and leading edges of research across the fields of anthropology, economics, political science, psychology, sociology, history, business, education, geography, law, and psychiatry, as well as the newer, more specialized areas of artificial intelligence, child development, cognitive science, communications, demography, linguistics, and management and decision science. It includes recommendations concerning new resources, facilities, and programs that may be needed over the next several years to ensure rapid progress and provide a high level of returns to basic research.
CISSP Cert Guide - Troy McMillan 2013-11-12
This is the eBook version of the print title. Note that the eBook does not provide access to the practice test software that accompanies the print book. Learn, prepare, and practice for CISSP exam success with the CISSP Cert Guide from Pearson IT Certification, a leader in IT Certification. Master CISSP exam topics Assess your knowledge with chapter-ending quizzes Review key concepts with exam preparation tasks CISSP Cert Guide is a best-of-breed exam study guide. Leading IT

certification experts Troy McMillan and Robin Abernathy share preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. You'll get a complete test preparation routine organized around proven series elements and techniques. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Review questions help you assess your knowledge, and a final preparation chapter guides you through tools and resources to help you craft your final study plan. This study guide helps you master all the topics on the CISSP exam, including Access control Telecommunications and network security Information security governance and risk management Software development security Cryptography Security architecture and design Operation security Business continuity and disaster recovery planning Legal, regulations, investigations, and compliance Physical (environmental) security

The Web Application Hacker's Handbook - Dafydd Stuttard 2011-03-16

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.

For the Record - National Research Council 1997-07-09

When you visit the doctor, information about you may be recorded in an office computer. Your tests may be sent to a laboratory or consulting physician. Relevant information may be transmitted to your health insurer or pharmacy. Your data may be collected by the state government or by an organization that accredits health care or studies medical costs. By making information more readily available to those who need it, greater use of computerized health information can help improve the quality of health care and reduce its costs. Yet health care organizations must find ways to ensure that electronic health information is not improperly divulged. Patient privacy has been an issue since the oath of Hippocrates first called on physicians to "keep silence" on patient matters, and with highly sensitive dataâ€"genetic information, HIV test results, psychiatric recordsâ€"entering patient records, concerns over privacy and security are growing. For the Record responds to the health care industry's need for greater guidance in protecting health information that increasingly flows through the national information infrastructureâ€"from patient to provider, payer, analyst, employer, government agency, medical product manufacturer, and beyond. This book makes practical detailed recommendations for technical and organizational solutions and national-level initiatives. For the Record describes two major types of privacy and security concerns that stem from the availability of health information in electronic form: the increased potential for inappropriate release of information held by individual organizations (whether by those with access to computerized records or those who break into them) and systemic concerns derived from open and widespread sharing of data among various parties. The committee reports on the technological and organizational aspects of security management, including basic principles of security; the effectiveness of technologies for user authentication, access control, and encryption; obstacles and incentives in the adoption of new technologies; and mechanisms for training, monitoring, and enforcement. For the Record reviews the growing interest in electronic medical records; the increasing value of health information to providers, payers, researchers, and administrators; and the current legal and regulatory environment for protecting health data. This information is of immediate interest to policymakers, health policy researchers, patient advocates, professionals in health data management, and other stakeholders.

The Art of Software Security Assessment - Mark Dowd 2007

Network Security Assessment - Chris McNab 2004

A practical handbook for network adminstrators who need to develop and implement security assessment programs, exploring a variety of offensive technologies, explaining how to design and deploy networks that are immune to offensive tools and scripts, and detailing an efficient testing model. Original. (Intermediate)

Drawdown - Paul Hawken 2017-04-18

• New York Times bestseller • The 100 most substantive solutions to reverse global warming, based on meticulous research by leading scientists and policymakers around the world “At this point in time, the Drawdown book is exactly what is needed; a credible, conservative solution-by-solution narrative that we can do it. Reading it is an effective inoculation against the widespread perception of doom that humanity cannot and will not solve the climate crisis. Reported by-effects include increased determination and a sense of grounded hope.” —Per Espen Stoknes, Author, What We Think About When We Try Not To Think About Global Warming “There’s been no real way for ordinary people to get an understanding of what they can do and what impact it can have. There remains no single, comprehensive, reliable compendium of carbon-reduction solutions across sectors. At least until now. . . . The public is hungry for this kind of practical wisdom.” —David Roberts, Vox “This is the ideal environmental sciences textbook—only it is too interesting and inspiring to be called a textbook.” —Peter Kareiva, Director of the Institute of the Environment and Sustainability, UCLA In the face of widespread fear and apathy, an international coalition of researchers, professionals, and scientists have come together to offer a set of realistic and bold solutions to climate change. One hundred techniques and practices are described here—some are well known; some you may have never heard of. They range from clean energy to educating girls in lower-income countries to land use practices that pull carbon out of the air. The solutions exist, are economically viable, and communities throughout the world are currently enacting them with skill and determination. If deployed collectively on a global scale over the next thirty years, they represent a credible path forward, not just to slow the earth’s warming but to reach drawdown, that point in time when greenhouse gases in the atmosphere peak and begin to decline. These measures promise cascading benefits to human health, security, prosperity, and well-being—giving us every reason to see this planetary crisis as an opportunity to create a just and livable world.

Software Quality Assurance - Ivan Mistrik 2015-10-12

Software Quality Assurance in Large Scale and Complex Software-intensive Systems presents novel and high-quality research related approaches that relate the quality of software architecture to system requirements, system architecture and enterprise-architecture, or software testing. Modern software has become complex and adaptable due to the emergence of globalization and new software technologies, devices and networks. These changes challenge both traditional software quality assurance techniques and software engineers to ensure software quality when building today (and tomorrow’s) adaptive, context-sensitive, and highly diverse applications. This edited volume presents state of the art techniques, methodologies, tools, best practices and guidelines for software quality assurance and offers guidance for future software engineering research and practice. Each contributed chapter considers the practical application of the topic through case studies, experiments, empirical validation, or systematic comparisons with other approaches already in practice. Topics of interest include, but are

not limited, to: quality attributes of system/software architectures; aligning enterprise, system, and software architecture from the point of view of total quality; design decisions and their influence on the quality of system/software architecture; methods and processes for evaluating architecture quality; quality assessment of legacy systems and third party applications; lessons learned and empirical validation of theories and frameworks on architectural quality; empirical validation and testing for assessing architecture quality. Focused on quality assurance at all levels of software design and development Covers domain-specific software quality assurance issues e.g. for cloud, mobile, security, context-sensitive, mash-up and autonomic systems Explains likely trade-offs from design decisions in the context of complex software system engineering and quality assurance Includes practical case studies of software quality assurance for complex, adaptive and context-critical systems

The Art of Deception - Kevin D. Mitnick 2011-08-04

The world's most infamous hacker offers an insider's view of the low-tech threats to high-tech security Kevin Mitnick's exploits as a cyber-desperado and fugitive form one of the most exhaustive FBI manhunts in history and have spawned dozens of articles, books, films, and documentaries. Since his release from federal prison, in 1998, Mitnick has turned his life around and established himself as one of the most sought-after computer security experts worldwide. Now, in The Art of Deception, the world's most notorious hacker gives new meaning to the old adage, "It takes a thief to catch a thief." Focusing on the human factors involved with information security, Mitnick explains why all the firewalls and encryption protocols in the world will never be enough to stop a savvy grifter intent on rifling a corporate database or an irate employee determined to crash a system. With the help of many fascinating true stories of successful attacks on business and government, he illustrates just how susceptible even the most locked-down information systems are to a slick con artist impersonating an IRS agent. Narrating from the points of view of both the attacker and the victims, he explains why each attack was so successful and how it could have been prevented in an engaging and highly readable style reminiscent of a true-crime novel. And, perhaps most importantly, Mitnick offers advice for preventing these types of social engineering hacks through security protocols, training programs, and manuals that address the human element of security.

Core Software Security - James Ransome 2013-12-09

"... an engaging book that will empower readers in both large and small software development and engineering organizations to build security into their products. ... Readers are armed with firm solutions for the fight against cyber threats." —Dr. Dena Haritos Tsamitis. Carnegie Mellon University "... a must read for security specialists, software developers and software engineers. ... should be part of every security professional’s library." —Dr. Larry Ponemon, Ponemon Institute "... the definitive how-to guide for software security professionals. Dr. Ransome, Anmol Misra, and Brook Schoenfield deftly outline the procedures and policies needed to integrate real security into the software development process. ...A must-have for anyone on the front lines of the Cyber War ..." —Cedric Leighton, Colonel, USAF (Ret.), Cedric Leighton Associates "Dr. Ransome, Anmol Misra, and Brook Schoenfield give you a magic formula in this book - the methodology and process to build security into the entire software development life cycle so that the software is secured at the source! " —Eric S. Yuan, Zoom Video Communications There is much publicity regarding network security, but the real cyber Achilles’ heel is insecure software. Millions of software vulnerabilities create a cyber house of cards, in which we conduct our digital lives. In response, security people build ever more elaborate cyber fortresses to protect this vulnerable software. Despite their efforts, cyber fortifications consistently fail to protect our digital treasures. Why? The security industry has failed to engage fully with the creative, innovative people who write software. Core Software Security expounds developer-centric software security, a holistic process to engage creativity for security. As long as software is developed by humans, it requires the human element to fix it. Developer-centric security is not only feasible but also cost effective and operationally relevant. The methodology builds security into software development, which lies at the heart of our cyber infrastructure. Whatever development method is employed, software must be secured at the source. Book Highlights: Supplies a practitioner's view of the SDL Considers Agile as a security enabler Covers the privacy elements in an SDL Outlines a holistic business-savvy SDL framework that includes people, process, and technology Highlights the key success factors, deliverables, and metrics for each phase of the SDL Examines cost efficiencies, optimized performance, and organizational structure of a developer-centric software security program and PSIRT Includes a chapter by noted security architect Brook Schoenfield who shares his insights and experiences in applying the book’s SDL framework View the authors' website at http://www.androidinsecurity.com/

Building Secure and Reliable Systems - Heather Adkins 2020-03-16

Can a system be considered truly reliable if it isn't fundamentally secure? Or can it be considered secure if it's unreliable? Security is crucial to the design and operation of scalable systems in production, as it plays an important part in product quality, performance, and availability. In this book, experts from Google share best practices to help your organization design scalable and reliable systems that are fundamentally secure. Two previous O’Reilly books from Google—Site Reliability Engineering and The Site Reliability Workbook—demonstrated how and why a commitment to the entire service lifecycle enables organizations to successfully build, deploy, monitor, and maintain software systems. In this latest guide, the authors offer insights into system design, implementation, and maintenance from practitioners who specialize in security and reliability. They also discuss how building and adopting their recommended best practices requires a culture that’s supportive of such change. You’ll learn about secure and reliable systems through: Design strategies Recommendations for coding, testing, and debugging practices Strategies to prepare for, respond to, and recover from incidents Cultural best practices that help teams across your organization collaborate effectively

Safeguarding Your Technology - Tom Szuba 1998

Modern Management's Guide to Information Technology - Michael Stephen Bird 2010-08-21

The articles included in this book present the concept of Information Technology (IT) management. There are various topics such as managing diverse project team members, leading IT professionals, aligning IT strategies to business strategies, improving the value chain analysis through effective management of technology resources, managing new technology in the education industry, and agile software development methodologies. He also includes the results of his dissertation study that reveals the software project managers view of the agile software development approach. He presents some valuable suggestions on how to improve the success of agile software development projects.

Software Security - Gary McGraw 2006

A computer security expert shows readers how to build more secure software by building security in and putting it into practice. The CD-ROM contains a tutorial and demo of the Fortify Source Code Analysis Suite.

Hacking Exposed Wireless - Johnny Cache 2007-04-10

Secure Your Wireless Networks the Hacking Exposed Way Defend against the latest pervasive and devastating wireless attacks using the tactical security information contained in this comprehensive volume. Hacking Exposed Wireless reveals how hackers zero in on susceptible networks and peripherals, gain access, and execute debilitating attacks. Find out how to plug security holes in Wi-Fi/802.11 and Bluetooth systems and devices. You'll also learn how to launch wireless exploits from Metasploit, employ bulletproof authentication and encryption, and sidestep insecure wireless hotspots. The book includes vital details on new, previously unpublished attacks alongside real-world countermeasures. Understand the concepts behind RF electronics, Wi-Fi/802.11, and Bluetooth Find out how hackers use NetStumbler, WiSPY, Kismet, KisMAC, and AiroPeek to target vulnerable wireless networks Defend against WEP key brute-force, aircrack, and traffic injection hacks Crack WEP at new speeds using Field Programmable Gate Arrays or your spare PS3

CPU cycles Prevent rogue AP and certificate authentication attacks Perform packet injection from Linux Launch DoS attacks using device driver-independent tools Exploit wireless device drivers using the Metasploit 3.0 Framework Identify and avoid malicious hotspots Deploy WPA/802.11i authentication and encryption using PEAP, FreeRADIUS, and WPA pre-shared keys

Effective Model-Based Systems Engineering - John M. Borky 2018-09-08

This textbook presents a proven, mature Model-Based Systems Engineering (MBSE) methodology that has delivered success in a wide range of system and enterprise programs. The authors introduce MBSE as the state of the practice in the vital Systems Engineering discipline that manages complexity and integrates technologies and design approaches to achieve effective, affordable, and balanced system solutions to the needs of a customer organization and its personnel. The book begins with a summary of the background and nature of MBSE. It summarizes the theory behind Object-Oriented Design applied to complex system architectures. It then walks through the phases of the MBSE methodology, using system examples to illustrate key points. Subsequent chapters broaden the application of MBSE in Service-Oriented Architectures (SOA), real-time systems, cybersecurity, networked enterprises, system simulations, and prototyping. The vital subject of system and architecture governance completes the discussion. The book features exercises at the end of each chapter intended to help readers/students focus on key points, as well as extensive appendices that furnish additional detail in particular areas. The self-contained text is ideal for students in a range of courses in systems architecture and MBSE as well as for practitioners seeking a highly practical presentation of MBSE principles and techniques.

Software Security Engineering - Nancy R. Mead 2004-04-21

Software Security Engineering draws extensively on the systematic approach developed for the Build Security In (BSI) Web site. Sponsored by the Department of Homeland Security Software Assurance Program, the BSI site offers a host of tools, guidelines, rules, principles, and other resources to help project managers address security issues in every phase of the software development life cycle (SDLC). The book's expert authors, themselves frequent contributors to the BSI site, represent two well-known resources in the security world: the CERT Program at the Software Engineering Institute (SEI) and Cigital, Inc., a consulting firm specializing in software security. This book will help you understand why Software security is about more than just eliminating vulnerabilities and conducting penetration tests Network security mechanisms and IT infrastructure security services do not sufficiently protect application software from security risks Software security initiatives should follow a risk-management approach to identify priorities and to define what is "good enough"–understanding that software security risks will change throughout the SDLC Project managers and software engineers need to learn to think like an attacker in order to address the range of functions that software should not do, and how software can better resist, tolerate, and recover when under attack

Guide to Computer Network Security - Joseph Migga Kizza 2020-06-03

This timely textbook presents a comprehensive guide to the core topics in cybersecurity, covering issues of security that extend beyond traditional computer networks to the ubiquitous mobile communications and online social networks that have become part of our daily lives. In the context of our growing dependence on an ever-changing digital ecosystem, this book stresses the importance of security awareness, whether in our homes, our businesses, or our public spaces. This fully updated new edition features new material on the security issues raised by blockchain technology, and its use in logistics, digital ledgers, payments systems, and digital contracts. Topics and features: Explores the full range of security risks and vulnerabilities in all connected digital systems Inspires debate over future developments and improvements necessary to enhance the security of personal, public, and private enterprise systems Raises thought-provoking questions regarding legislative, legal, social, technical, and ethical challenges, such as the tension between privacy and security Describes the fundamentals of traditional computer network security, and common threats to security Reviews the current landscape of tools, algorithms, and professional best practices in use to maintain security of digital systems Discusses the security issues introduced by the latest generation of network technologies, including mobile systems, cloud computing, and blockchain Presents exercises of varying levels of difficulty at the end of each chapter, and concludes with a diverse selection of practical projects Offers supplementary material for students and instructors at an associated website, including slides, additional projects, and syllabus suggestions This important textbook/reference is an invaluable resource for students of computer science, engineering, and information management, as well as for practitioners working in data- and information-intensive industries.

Impact Evaluation in Practice, Second Edition - Paul J. Gertler 2016-09-12

The second edition of the Impact Evaluation in Practice handbook is a comprehensive and accessible introduction to impact evaluation for policy makers and development practitioners. First published in 2011, it has been used widely across the development and academic communities. The book incorporates real-world examples to present practical guidelines for designing and implementing impact evaluations. Readers will gain an understanding of impact evaluations and the best ways to use them to design evidence-based policies and programs. The updated version covers the newest techniques for evaluating programs and includes state-of-the-art implementation advice, as well as an expanded set of examples and case studies that draw on recent development challenges. It also includes new material on research ethics and partnerships to conduct impact evaluation. The handbook is divided into four sections: Part One discusses what to evaluate and why; Part Two presents the main impact evaluation methods; Part Three addresses how to manage impact evaluations; Part Four reviews impact evaluation sampling and data collection. Case studies illustrate different applications of impact evaluations. The book links to complementary instructional material available online, including an applied case as well as questions and answers. The updated second edition will be a valuable resource for the international development community, universities, and policy makers looking to build better evidence around what works in development.

The Art of Software Security Assessment - Mark Dowd 2007

Solid code auditing methodologies and secrets of the trade from two very successful security researchers.

The Security Risk Assessment Handbook - Douglas Landoll 2016-04-19

The Security Risk Assessment Handbook: A Complete Guide for Performing Security Risk Assessments provides detailed insight into precisely how to conduct an information security risk assessment. Designed for security professionals and their customers who want a more in-depth understanding of the risk assessment process, this volume contains real-wor

Risk Centric Threat Modeling - Tony UcedaVelez 2015-05-26

This book introduces the Process for Attack Simulation & Threat Analysis (PASTA) threat modeling methodology. It provides an introduction to various types of application threat modeling and introduces a risk-centric methodology aimed at applying security countermeasures that are commensurate to the possible impact that could be sustained from defined threat models, vulnerabilities, weaknesses, and attack patterns. This book describes how to apply application threat modeling as an advanced preventive form of security. The authors discuss the methodologies, tools, and case studies of successful application threat modeling techniques. Chapter 1 provides an overview of threat modeling, while Chapter 2 describes the objectives and benefits of threat modeling. Chapter 3 focuses on existing threat modeling approaches, and Chapter 4 discusses integrating threat modeling within the different types of Software Development Lifecycles (SDLCs). Threat modeling and risk management is the focus of Chapter 5. Chapter 6 and Chapter 7 examine Process for Attack Simulation and Threat Analysis (PASTA). Finally, Chapter 8 shows how to use the PASTA risk-centric threat modeling process to analyze the risks of specific threat agents targeting web applications. This chapter focuses specifically on the web

application assets that include customer’s confidential data and business critical functionality that the web application provides. • Provides a detailed walkthrough of the PASTA methodology alongside software development activities, normally conducted via a standard SDLC process • Offers precise steps to take when combating threats to businesses • Examines real-life data breach incidents and lessons for risk management Risk Centric Threat Modeling: Process for Attack Simulation and Threat Analysis is a resource for software developers, architects, technical risk managers, and seasoned security professionals.

Secure Programming with Static Analysis - Brian Chess 2007-06-29

The First Expert Guide to Static Analysis for Software Security! Creating secure code requires more than just good intentions. Programmers need to know that their code will be safe in an almost infinite number of scenarios and configurations. Static source code analysis gives users the ability to review their work with a fine-toothed comb and uncover the kinds of errors that lead directly to security vulnerabilities. Now, there’s a complete guide to static analysis: how it works, how to integrate it into the software development processes, and how to make the most of it during security code review. Static analysis experts Brian Chess and Jacob West look at the most common types of security defects that occur today. They illustrate main points using Java and C code examples taken from real-world security incidents, showing how coding errors are exploited, how they could have been prevented, and how static analysis can rapidly uncover similar mistakes. This book is for everyone concerned with building more secure software: developers, security engineers, analysts, and testers.

Threat Modeling - Adam Shostack 2014-02-12

The only security book to be chosen as a Dr. Dobbs Jolt Award Finalist since Bruce Schneier's Secrets and Lies and Applied Cryptography! Adam Shostack is responsible for security development lifecycle threat modeling at Microsoft and is one of a handful of threat modeling experts in the world. Now, he is sharing his considerable expertise into this unique book. With pages of specific actionable advice, he details how to build better security into the design of systems, software, or services from the outset. You'll explore various threat modeling approaches, find out how to test your designs against threats, and learn effective ways to address threats that have been validated at Microsoft and other top companies. Systems security managers, you'll find tools and a framework for structured thinking about what can go wrong. Software developers, you'll appreciate the jargon-free and accessible introduction to this essential skill. Security professionals, you'll learn to discern changing threats and discover the easiest ways to adopt a structured approach to threat modeling. Provides a unique how-to for security and software developers who need to design secure products and systems and test their designs Explains how to threat model and explores various threat modeling approaches, such as asset-centric, attacker-centric and software-centric Provides effective approaches and techniques that have been proven at Microsoft and elsewhere Offers actionable how-to advice not tied to any specific software, operating system, or programming language Authored by a Microsoft professional who is one of the most prominent threat modeling experts in the world As more software is delivered on the Internet or operates on Internet-connected devices, the design of secure software is absolutely critical. Make sure you're ready with Threat Modeling: Designing for Security.

Essentials of Specific Learning Disability Identification - Vincent C. Alfonso 2018-03-20

Practical, up-to-date guidance on identifying Specific Learning Disability Essentials of Specific Learning Disability Identification provides accessible, authoritative guidance on specific learning disability (SLD), with the most up-to-date information on assessment, identification, interventions, and more. Contributions by leading experts examine multiple theoretical orientations and various identification approaches for dyslexia, dyscalculia, dysgraphia, and other common SLDs. Emphasizing real-world utility, this book provides important information for professionals who work with children and youth at risk; many of the SLD identification practices can be put to work immediately, and the expert coverage offers many strategies and interventions for student support in the classroom. This new second edition has been updated to align with the most current understanding of SLD manifestations, diagnostic assessment, and evidence-based interventions, and includes new material covering nonverbal learning disability, speech-language impairment, general learning difficulties, and differentially diagnosing SLD from other conditions. Early SLD identification and the right kind of help can raise the trajectory of a child's life. This book provides in-depth information to facilitate accurate identification and appropriate intervention to help you help the children in your care. Understand how SLD manifests in academic performance Learn theory- and research-based approaches to SLD identification Examine the latest information about new aspects of SLD determination Utilize appropriate and effective intervention strategies for student support If a child's learning disability is caught early, and the correct type of support is provided, that child gets the chance to develop the skills that lead to achievement in school and beyond. As a high-incidence disorder, SLD affects 10-15 percent of the general population, making successful identification an essential skill for those who work with children. Essentials of Specific Learning Disability Identification provides authoritative guidance and practical methods that can help you start changing children's lives today.

The Security Development Lifecycle - Michael Howard 2006

Your customers demand and deserve better security and privacy in their software. This book is the first to detail a rigorous, proven methodology that measurably minimizes security bugs--the Security Development Lifecycle (SDL). In this long-awaited book, security experts Michael Howard and Steve Lipner from the Microsoft Security Engineering Team guide you through each stage of the SDL--from education and design to testing and post-release. You get their first-hand insights, best practices, a practical history of the SDL, and lessons to help you implement the SDL in any development organization. Discover how to: Use a streamlined risk-analysis process to find security design issues before code is committed Apply secure-coding best practices and a proven testing process Conduct a final security review before a product ships Arm customers with prescriptive guidance to configure and deploy your product more securely Establish a plan to respond to new security vulnerabilities Integrate security discipline into agile methods and processes, such as Extreme Programming and Scrum Includes a CD featuring: A six-part security class video conducted by the authors and other Microsoft security experts Sample SDL documents and fuzz testing tool PLUS--Get book updates on the Web. For customers who purchase an ebook version of this title, instructions for downloading the CD files can be found in the ebook.

Occupational Outlook Handbook - United States. Bureau of Labor Statistics 1976

Essential Cybersecurity Science - Josiah Dykstra 2015-12-08

If you’re involved in cybersecurity as a software developer, forensic investigator, or network administrator, this practical guide shows you how to apply the scientific method when assessing techniques for protecting your information systems. You’ll learn how to conduct scientific experiments on everyday tools and procedures, whether you’re evaluating corporate security systems, testing your own security product, or looking for bugs in a mobile game. Once author Josiah Dykstra gets you up to speed on the scientific method, he helps you focus on standalone, domain-specific topics, such as cryptography, malware analysis, and system security engineering. The latter chapters include practical case studies that demonstrate how to use available tools to conduct domain-specific scientific experiments. Learn the steps necessary to conduct scientific experiments in cybersecurity Explore fuzzing to test how your software handles various inputs Measure the performance of the Snort intrusion detection system Locate malicious “needles in a haystack” in your network and IT environment Evaluate cryptography design and application in IoT products Conduct an experiment to identify relationships between similar malware binaries Understand system-level security requirements for enterprise networks and web services

Offensive Countermeasures - John Strand 2013-07-08

Tired of playing catchup with hackers? Does it ever seem they

have all of the cool tools? Does it seem like defending a network is just not fun? This books introduces new cyber-security defensive tactics to annoy attackers, gain attribution and insight on who and where they are. It discusses how to attack attackers in a way which is legal and incredibly useful.

Code Auditing - John Viega 2006-01-01

Using a practical approach and real-life experiences, this book trains developers to root out security vulnerabilities in existing code and to avoid these flaws in new projects.

The Tangled Web - Michal Zalewski 2011-11-15

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.

Hacking- The art Of Exploitation - J. Erickson 2018-03-06

This text introduces the spirit and theory of hacking as well as the science behind it all; it also provides some core techniques and tricks of hacking so you can think like a hacker, write your own hacks or thwart potential system attacks.

The Art of Network Penetration Testing - Royce Davis 2020-12-29

The Art of Network Penetration Testing is a guide to simulating an internal security breach. You’ll take on the role of the attacker and work through every stage of a professional pentest, from information gathering to seizing control of a system and owning the network. Summary Penetration testing is about more than just getting through a perimeter firewall. The biggest security threats are inside the network, where attackers can rampage through sensitive data by exploiting weak access controls and poorly patched software. Designed for up-and-coming security professionals, The Art of Network Penetration Testing teaches you how to take over an enterprise network from the inside. It lays out every stage of an internal security assessment step-by-step, showing you how to identify weaknesses before a malicious invader can do real damage. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Penetration testers uncover security gaps by attacking networks exactly like malicious intruders do. To become a world-class pentester, you need to master offensive security concepts, leverage a proven methodology, and practice, practice, practice. Th is book delivers insights from security expert Royce Davis, along with a virtual testing environment you can use to hone your skills. About the book The Art of Network Penetration Testing is a guide to simulating an internal security breach. You’ll take on the role of the attacker and work through every stage of a professional pentest, from information gathering to seizing control of a system and owning the network. As you brute force passwords, exploit unpatched services, and elevate network level privileges, you’ll learn where the weaknesses are—and how to take advantage of them. What's inside Set up a virtual pentest lab Exploit Windows and Linux network vulnerabilities Establish persistent re-entry to compromised targets Detail your findings in an engagement report About the reader For tech professionals. No security experience required. About the author Royce Davis has orchestrated hundreds of penetration tests, helping to secure many of the largest companies in the world. Table of Contents 1 Network Penetration Testing PHASE 1 - INFORMATION GATHERING 2 Discovering network hosts 3 Discovering network services 4 Discovering network vulnerabilities PHASE 2 - FOCUSED PENETRATION 5 Attacking vulnerable web services 6 Attacking vulnerable database services 7 Attacking unpatched services PHASE 3 - POST-EXPLOITATION AND PRIVILEGE ESCALATION 8 Windows post-exploitation 9 Linux or UNIX post-exploitation 10 Controlling the entire network PHASE 4 - DOCUMENTATION 11 Post-engagement cleanup 12 Writing a solid pentest deliverable

The Mac Hacker's Handbook - Charlie Miller 2011-03-21

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.