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830 - ARTHUR SHILOH

Take a deep dive into the many uses of dynamic SQL in Microsoft SQL Server. This edition has been updated to use the newest features in SQL Server 2016 and SQL Server 2017 as well as incorporating the changing landscape of analytics and database administration. Code examples have been updated with new system objects and functions to improve efficiency and maintainability. Executing dynamic SQL is key to large-scale searching based on user-entered criteria. Dynamic SQL can generate lists of values and even code with minimal impact on performance. Dynamic SQL enables dynamic pivoting of data for business intelligence solutions as well as customizing of database objects. Yet dynamic SQL is feared by many due to concerns over SQL injection or code maintainability. Dynamic SQL: Applications, Performance, and Security in Microsoft SQL Server helps you bring the productivity and user-satisfaction of flexible and responsive applications to your organization safely and securely. Your organization’s increased ability to respond to rapidly changing business scenarios will build competitive advantage in an increasingly crowded and competitive global marketplace. With a focus on new applications and modern database architecture, this edition illustrates that dynamic SQL continues to evolve and be a valuable tool for administration, performance optimization, and analytics. What You'ill Learn Build flexible applications that respond to changing business needs Take advantage of creative, innovative, and productive uses of dynamic SQL Know about SQL injection and be confident in your defenses against it Address performance concerns in stored procedures and dynamic SQL Troubleshoot and debug dy-

namic SQL to ensure correct results Automate your administration of features within SQL Server Who This Book is For Developers and database administrators looking to hone and build their T-SQL coding skills. The book is ideal for developers wanting to plumb the depths of application flexibility and troubleshoot performance issues involving dynamic SQL. The book is also ideal for programmers wanting to learn what dynamic SQL is about and how it can help them deliver competitive advantage to their organizations.

Social network usage has increased exponentially in recent years. Platforms like Facebook, Twitter, Google+, LinkedIn and Instagram, not only facilitate sharing of personal data but also connect people professionally. However, development of these platforms with more enhanced features like HTML5, CSS, XHTML and Java Script expose these sites to various vulnerabilities that may be the root cause of various threats. Therefore, social networking sites have become an attack surface for various cyber-attacks such as XSS attack and SQL Injection. Numerous defensive techniques have been proposed, yet with technology up-gradation current scenarios demand for more efficient and robust solutions. Cross-Site Scripting Attacks: Classification, Attack, and Countermeasures is a comprehensive source which provides an overview of web-based vulnerabilities and explores XSS attack in detail. This book provides a detailed overview of the XSS attack; its classification, recent incidences on various web applications, and impacts of the XSS attack on the target victim. This book addresses the main contributions of various researchers in XSS domain. It provides in-depth analysis of these methods along with their comparative study. The main focus is a novel framework which is based on Clustering and Context based sanitization approach to protect against XSS attack on social network. The implementation details conclude that it is an effective technique to thwart XSS attack. The open challenges and future research direction discussed in this book will help further to the academic researchers and industry specific persons in the domain of security.

A big novel about a small town... When Barry Fairbrother dies in his early forties, the town of Pagford is left in shock. Pagford is, seemingly, an English idyll, with a cobbled market square and an ancient abbey, but what lies behind the pretty façade is a town at war. Rich at war with poor, teenagers at war with their parents, wives at war with their husbands, teachers at war with their pupils...Pagford is not what it first seems. And the empty seat left by Barry on the parish council soon becomes the catalyst for the biggest war the town has yet seen. Who will triumph in an election fraught with passion, duplicity, and unexpected revelations? A big novel about a small town, The Casual Vacancy is J.K. Rowling's first novel for adults. It is the work of a storyteller like no other.

SQL Injection Attacks and Defense, First Edition: Winner of the Best Book Bejtlich Read Award " SQL injection is probably the number one problem for any server-side application, and this book unequaled in its coverage."--Richard Bejtlich, Tao Security blog SQL injection represents one of the most dangerous and well-known, yet misunderstood, security vulnerabilities on the Internet, largely because there is no central repository of information available for penetration testers, IT security consultants and practitioners, and web/software developers to turn to for help. SQL Injection Attacks and Defense, Second Edition is the only book de-

voted exclusively to this long-established but recently growing threat. This is the definitive resource for understanding, finding, exploiting, and defending against this increasingly popular and particularly destructive type of Internet-based attack. SQL Injection Attacks and Defense, Second Edition includes all the currently known information about these attacks and significant insight from its team of SQL injection experts, who tell you about: Understanding SQL Injection - Understand what it is and how it works Find, confirm and automate SQL injection discovery Tips and tricks for finding SQL injection within code Create exploits for using SQL injection Design apps to avoid the dangers these attacks SQL injection on different databases SQL injection on different technologies SQL injection testing techniques Case Studies Securing SQL Server, Second Edition is the only book to provide a complete understanding of SQL injection, from the basics of vulnerability to discovery, exploitation, prevention, and mitigation measures. Covers unique, publicly unavailable information, by technical experts in such areas as Oracle, Microsoft SQL Server, and MySQL--including new developments for Microsoft SQL Server 2012 (Denali). Written by an established expert, author, and speaker in the field, with contributions from a team of equally renowned creators of SQL injection tools, applications, and educational materials.

What is SQL injection? -- Testing for SQL injection -- Reviewing code for SQL injection -- Exploiting SQL injection -- Blind SQL injection exploitation -- Exploiting the operating system -- Advanced topics -- Code-level defenses -- Platform level defenses -- Confirming and recovering from SQL injection attacks -- References.

This book includes high-quality research papers presented at the Third International Conference on Innovative Computing and Communication (ICICC 2020), which is held at the Shaheed Sukhdev College of Business Studies, University of Delhi, Delhi, India, on 21–23 February, 2020. Introducing the innovative works of scientists, professors, research scholars, students and industrial experts in the field of computing and communication, the book promotes the transformation of fundamental research into institutional and industrialized research and the conversion of applied exploration into real-time applications.

Project Report from the year 2018 in the subject Computer Science - Applied, grade: 3.91/4, language: English, abstract: Structured Query Language Injection is one of the vulnerabilities in OSWAP Top 10 list for web-based application exploitation. In this study, we will be demonstrating the different methods of SQL injection attacks and prevention techniques will be illustrated. Web application are widespread as they have become the necessity for the everyday life. Most web-based applications communicate with a database using a machine-understandable language called Structured Query Language (SQL). SQL injection is a code injection technique, used to attack data-driven applications, in which malicious SQL statements are inserted from the client of the application.

Rigorously test and improve the security of all your Web software! It’s as certain as death and taxes: hackers will mercilessly attack your Web sites, applications, and services. If you’re vulnerable, you’d better discover these attacks yourself, before the black hats do. Now, there’s a definitive, hands-on guide to security-testing any Web-based software: How to Break Web Software.

In this book, two renowned experts address every category of Web software exploit: attacks on clients, servers, state, user inputs, and more. You'll master powerful attack tools and techniques as you uncover dozens of crucial, widely exploited flaws in Web architecture and coding. The authors reveal where to look for potential threats and attack vectors, how to rigorously test for each of them, and how to mitigate the problems you find. Coverage includes · Client vulnerabilities, including attacks on client--side validation · State-based attacks: hidden fields, CGI parameters, cookie poisoning, URL jumping, and session hijacking · Attacks on user-supplied inputs: cross-site scripting, SQL injection, and directory traversal · Language- and technology-based attacks: buffer overflows, canonicalization, and NULL string attacks · Server attacks: SQL Injection with stored procedures, command injection, and server fingerprinting · Cryptography, privacy, and attacks on Web services Your Web software is mission-critical–it can't be compromised. Whether you're a developer, tester, QA specialist, or IT manager, this book will help you protect that software–systematically.

Learn to exploit vulnerable database applications using SQL injection tools and techniques, while understanding how to effectively prevent attacks Key FeaturesUnderstand SQL injection and its effects on websites and other systemsGet hands-on with SQL injection using both manual and automated toolsExplore practical tips for various attack and defense strategies relating to SQL injectionBook Description SQL injection (SQLi) is probably the most infamous attack that can be unleashed against applications on the internet. SQL Injection Strategies is an end-to-end guide for beginners looking to learn how to perform SQL injection and test the security of web applications, websites, or databases, using both manual and automated techniques. The book serves as both a theoretical and practical guide to take you through the important aspects of SQL injection, both from an attack and a defense perspective. You'll start with a thorough introduction to SQL injection and its impact on websites and systems. Later, the book features steps to configure a virtual environment, so you can try SQL injection techniques safely on your own computer. These tests can be performed not only on web applications but also on web services and mobile applications that can be used for managing IoT environments. Tools such as sqlmap and others are then covered, helping you understand how to use them effectively to perform SQL injection attacks. By the end of this book, you will be well-versed with SQL injection, from both the attack and defense perspective. What you will learnFocus on how to defend against SQL injection attacksUnderstand web application securityGet up and running with a variety of SQL injection conceptsBecome well--versed with different SQL injection scenariosDiscover SQL injection manual attack techniquesDelve into SQL injection automated techniquesWho this book is for This book is ideal for penetration testers, ethical hackers, or anyone who wants to learn about SQL injection and the various attack and defense strategies against this web security vulnerability. No prior knowledge of SQL injection is needed to get started with this book.

The increasing use of web applications to provide reliable online services, such as banking, shopping, etc., and to store sensitive user data has made them vulnerable to attacks that target them. In particular, SQL injection, whihc allows attackers to gain unau-

thorized access to the database by injecting specially crafted input strings, is one of the most serious threats to web applications. Although researchers and practioners have proposed various menthods to address the SQL injection problem, organizations continue to be its victim, as attackers are successfully able to circumvent the employed techniques. In this research, we develop a Runtime Monitoring Framework to detect and prevent SQL Injection Attacks on web applications. At its core, the framework leverages the knowledge gained from pre-deployment testing of web applications to identify legal/valid execuiton paths. Monitors are then developed and instrumented to observe the application's behavior and check it for compliance with the valid/legal execution paths obtained; any deviation in the application's behavior is identified as a possible SQL Injection Attack. We conducted an extensive evaluation of the framework by targeting subject applications with a large number of both legitimate and malicious inputs, and assessed its ability to detect and prevent SQL Injection Attacks. The framework successfully allowed all the legitimate inputs to access the database without generating any false positives, and was able to effectively detect attacks without generating false negative. Moreover, the framework imposed a low runtime overhead on the subject applications compared to other techniques.

This brief provides readers a complete and self-contained resource for information about DDoS attacks and how to defend against them. It presents the latest developments in this increasingly crucial field along with background context and survey material. The book also supplies an overview of DDoS attack issues, DDoS attack detection methods, DDoS attack source traceback, and details on how hackers organize DDoS attacks. The author concludes with future directions of the field, including the impact of DDoS attacks on cloud computing and cloud technology. The concise yet comprehensive nature of this brief makes it an ideal reference for researchers and professionals studying DDoS attacks. It is also a useful resource for graduate students interested in cyberterrorism and networking.

This book on computer security threats explores the computer security threats and includes a broad set of solutions to defend the computer systems from these threats. The book is triggered by the understanding that digitalization and growing dependence on the Internet poses an increased risk of computer security threats in the modern world. The chapters discuss different research frontiers in computer security with algorithms and implementation details for use in the real world. Researchers and practitioners in areas such as statistics, pattern recognition, machine learning, artificial intelligence, deep learning, data mining, data analytics and visualization are contributing to the field of computer security. The intended audience of this book will mainly consist of researchers, research students, practitioners, data analysts, and business professionals who seek information on computer security threats and its defensive measures.

The huge proliferation of security vulnerability exploits, worms, and viruses place an incredible drain on both cost and confidence for manufacturers and consumers. The release of trustworthy code requires a specific set of skills and techniques, but this information is often dispersed and decentralized, encrypted in its own jargon and terminology,

Advancements in technology have allowed for the creation of new tools and innovations that can improve different aspects of life. These applications can be utilized across different technological platforms. Application Development and Design: Concepts, Methodologies, Tools, and Applications is a comprehensive reference source for the latest scholarly material on trends, techniques, and uses of various technology applications and examines the benefits and challenges of these computational developments. Highlighting a range of pertinent topics such as software design, mobile applications, and web applications, this multi-volume book is ideally designed for researchers, academics, engineers, professionals, students, and practitioners interested in emerging technology applications.

This book presents recent advances in the field of distributed computing and machine learning, along with cutting-edge research in the field of Internet of Things (IoT) and blockchain in distributed environments. It features selected high-quality research papers from the First International Conference on Advances in Distributed Computing and Machine Learning (ICADCML 2020), organized by the School of Information Technology and Engineering, VIT, Vellore, India, and held on 30–31 January 2020.

This book constitutes revised selected papers from the International Conference on Advanced Computing, Networking and Security, ADCONS 2011, held in Surathkal, India, in December 2011. The 73 papers included in this book were carefully reviewed and selected from 289 submissions. The papers are organized in topical sections on distributed computing, image processing, pattern recognition, applied algorithms, wireless networking, sensor networks, network infrastructure, cryptography, Web security, and application security.

This book constitutes the refereed proceedings of the International Symposium on Security in Computing and Communications, SSCC 2014, held in Delhi, India, in September 2013. The 36 revised full papers presented together with 12 work-in-progress papers were carefully reviewed and selected from 132 submissions. The papers are organized in topical sections on security and privacy in networked systems; authentication and access control systems; encryption and cryptography; system and network security; work-in-progress.

Project Report from the year 2018 in the subject Computer Science - Applied, grade: 3.91/4, , language: English, abstract: Structured Query Language Injection is one of the vulnerabilities in OSWAP Top 10 list for web-based application exploitation. In this study, we will be demonstrating the different methods of SQL injection attacks and prevention techniques will be illustrated. Web application are widespread as they have become the necessity for the everyday life. Most web-based applications communicate with a database using a machine-understandable language called Structured Query Language (SQL). SQL injection is a code injection technique, used to attack data-driven applications, in which malicious SQL statements are inserted from the client of the application.

This open access book provides the first comprehensive collection of papers that provide an integrative view on cybersecurity. It discusses theories, problems and solutions on the relevant ethical issues involved. This work is sorely needed in a world where cybersecurity has become indispensable to protect trust and

confidence in the digital infrastructure whilst respecting fundamental values like equality, fairness, freedom, or privacy. The book has a strong practical focus as it includes case studies outlining ethical issues in cybersecurity and presenting guidelines and other measures to tackle those issues. It is thus not only relevant for academics but also for practitioners in cybersecurity such as providers of security software, governmental CERTs or Chief Security Officers in companies.

In today's world, SQL Injection is a serious security threat over the Internet for the various dynamic web applications residing over the internet. These Web applications conduct many vital processes in various web-based businesses. As the use of internet for various online services is rising, so is the security threats present in the web increasing. There is a universal need present for all dynamic web applications and this universal need is the need to store, retrieve or manipulate information from a database. Most of systems which manage the databases and its requirements such as MySQL Server and PostgreSQL use SQL as their language. Flexibility of SQL makes it a powerful language. It allows its users to ask what he/she wants without leaking any information about how the data will be fetched. However the vast use of SQL based databases has made it the center of attention of hackers. They take advantage of the poorly coded Web applications to attack the databases. They introduce an apparent SQL query, through an unauthorized user input, into the legitimate query statement. In this paper, we have tried to present a comprehensive review of all the different types of SQL injection attacks present, as well as detection of such attacks and preventive measure used. We have highlighted their individual strengths and weaknesses. Such a classification would help other researchers to choose the right technique for further studies.

This three-volume set LNCS 13338-13340 constitutes the thoroughly refereed proceedings of the 8th International Conference on Artificial Intelligence and Security, ICAIS 2022, which was held in Qinghai, China, in July 2022. The total of 166 papers included in the 3 volumes were carefully reviewed and selected from 1124 submissions. The papers present research, development, and applications in the fields of artificial intelligence and information security

SQL Injection Attacks and Defense, First Edition: Winner of the Best Book Bejtlich Read Award "SQL injection is probably the number one problem for any server-side application, and this book unequaled in its coverage." –Richard Bejtlich, Tao Security blog SQL injection represents one of the most dangerous and well-known, yet misunderstood, security vulnerabilities on the Internet, largely because there is no central repository of information available for penetration testers, IT security consultants and practitioners, and web/software developers to turn to for help. SQL Injection Attacks and Defense, Second Edition is the only book devoted exclusively to this long-established but recently growing threat. This is the definitive resource for understanding, finding, exploiting, and defending against this increasingly popular and particularly destructive type of Internet-based attack. SQL Injection Attacks and Defense, Second Edition includes all the currently known information about these attacks and significant insight from its team of SQL injection experts, who tell you about: Understanding SQL Injection – Understand what it is and how it works Find, confirm and

automate SQL injection discovery Tips and tricks for finding SQL injection within code Create exploits for using SQL injection Design apps to avoid the dangers these attacks SQL injection on different databases SQL injection on different technologies SQL injection testing techniques Case Studies Securing SQL Server, Second Edition is the only book to provide a complete understanding of SQL injection, from the basics of vulnerability to discovery, exploitation, prevention, and mitigation measures. Covers unique, publicly unavailable information, by technical experts in such areas as Oracle, Microsoft SQL Server, and MySQL---including new developments for Microsoft SQL Server 2012 (Denali). Written by an established expert, author, and speaker in the field, with contributions from a team of equally renowned creators of SQL injection tools, applications, and educational materials.

This proceedings volume covers the proceedings of ERCICA 2015. ERCICA provides an interdisciplinary forum for researchers, professional engineers and scientists, educators, and technologists to discuss, debate and promote research and technology in the upcoming areas of Computing, Information, Communication and their Applications. The contents of this book cover emerging research areas in fields of Computing, Information, Communication and Applications. This will prove useful to both researchers and practicing engineers.

This book is intended to present the state of the art in research on machine learning and big data analytics. The accepted chapters covered many themes including artificial intelligence and data mining applications, machine learning and applications, deep learning technology for big data analytics, and modeling, simulation, and security with big data. It is a valuable resource for researchers in the area of big data analytics and its applications.

Presents the fundamental concepts of database management. This text is suitable for a first course in databases at the junior/senior undergraduate level or the first year graduate level.

"The book you are about to read will arm you with the knowledge you need to defend your network from attackers—both the obvious and the not so obvious.... If you are new to network security, don't put this book back on the shelf! This is a great book for beginners and I wish I had access to it many years ago. If you've learned the basics of TCP/IP protocols and run an open source or commercial IDS, you may be asking 'What's next?' If so, this book is for you." —Ron Gula, founder and CTO, Tenable Network Security, from the Foreword "Richard Bejtlich has a good perspective on Internet security—one that is orderly and practical at the same time. He keeps readers grounded and addresses the fundamentals in an accessible way." —Marcus Ranum, TruSecure "This book is not about security or network monitoring: It's about both, and in reality these are two aspects of the same problem. You can easily find people who are security experts or network monitors, but this book explains how to master both topics." —Luca Deri, ntop.org "This book will enable security professionals of all skill sets to improve their understanding of what it takes to set up, maintain, and utilize a successful network intrusion detection strategy." —Kirby Kuehl, Cisco Systems Every network can be compromised. There are too many systems, offering too many services, running too many flawed applications. No amount of careful coding, patch management, or access control can keep out every attacker. If prevention eventually fails, how do you pre-

pare for the intrusions that will eventually happen? Network security monitoring (NSM) equips security staff to deal with the inevitable consequences of too few resources and too many responsibilities. NSM collects the data needed to generate better assessment, detection, and response processes—resulting in decreased impact from unauthorized activities. In The Tao of Network Security Monitoring , Richard Bejtlich explores the products, people, and processes that implement the NSM model. By focusing on case studies and the application of open source tools, he helps you gain hands-on knowledge of how to better defend networks and how to mitigate damage from security incidents. Inside, you will find in-depth information on the following areas. The NSM operational framework and deployment considerations. How to use a variety of open-source tools—including Sguil, Argus, and Ethereal—to mine network traffic for full content, session, statistical, and alert data. Best practices for conducting emergency NSM in an incident response scenario, evaluating monitoring vendors, and deploying an NSM architecture. Developing and applying knowledge of weapons, tactics, telecommunications, system administration, scripting, and programming for NSM. The best tools for generating arbitrary packets, exploiting flaws, manipulating traffic, and conducting reconnaissance. Whether you are new to network intrusion detection and incident response, or a computer-security veteran, this book will enable you to quickly develop and apply the skills needed to detect, prevent, and respond to new and emerging threats.

This book covers both basic and high-level concepts relating to the intelligent computing paradigm and data sciences in the context of distributed computing, big data, data sciences, high-performance computing and Internet of Things. It is becoming increasingly important to develop adaptive, intelligent computing-centric, energy-aware, secure and privacy-aware systems in high-performance computing and IoT applications. In this context, the book serves as a useful guide for industry practitioners, and also offers beginners a comprehensive introduction to basic and advanced areas of intelligent computing. Further, it provides a platform for researchers, engineers, academics and industrial professionals around the globe to showcase their recent research concerning recent trends. Presenting novel ideas and stimulating interesting discussions, the book appeals to researchers and practitioners working in the field of information technology and computer science.

A lot of research has gone into eliminating SQL Injection attacks over the past decade and yet it is one of the most prevalent web based attacked harming commerce as well as privacy today. This is a clear indicator that we need to look deeper than just the network and application layer to consolidate security recommendations and practices into the core of any application - its data layer.

Computer application, Network Security and Cryptography, Pattern Analysis and Machine Intelligence Intelligent Databases and Information Retrieval, Image Processing, Wireless Sensor Network, Computational Biology and Bioinformatics

"This book provides the latest research findings, solutions and relevant theoretical frameworks in the area of blockchain technologies, information security, and privacy in computing and communication for professionals who want to improve their understand-

ing of the recent challenges, design, and issues in these areas"--

Learn how people break websites and how you can, too. Real--World Bug Hunting is the premier field guide to finding software bugs. Whether you're a cyber-security beginner who wants to make the internet safer or a seasoned developer who wants to write secure code, ethical hacker Peter Yaworski will show you how it's done. You'll learn about the most common types of bugs like cross-site scripting, insecure direct object references, and server-side request forgery. Using real-life case studies of rewarded vulnerabilities from applications like Twitter, Facebook, Google, and Uber, you'll see how hackers manage to invoke race conditions while transferring money, use URL parameter to cause users to like unintended tweets, and more. Each chapter introduces a vulnerability type accompanied by a series of actual reported bug bounties. The book's collection of tales from the field will teach you how attackers trick users into giving away their sensitive information and how sites may reveal their vulnerabilities to savvy users. You'll even learn how you could turn your challenging new hobby into a successful career. You'll learn: • How the internet works and basic web hacking concepts • How attackers compromise websites • How to identify functionality commonly associated with vulnerabilities • How to find bug bounty programs and submit effective vulnerability reports Real-World Bug Hunting is a fascinating soup-to-nuts primer on web security vulnerabilities, filled with stories from the trenches and practical wisdom. With your new understanding of site security and weaknesses, you can help make the web a safer place--and profit while you're at it.

Seven Deadliest Web Application Attacks highlights the vagaries of web security by discussing the seven deadliest vulnerabilities exploited by attackers. This book pinpoints the most dangerous hacks and exploits specific to web applications, 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 presents examples of different attacks conducted against web sites. The methodology behind the attack is explored, showing its potential impact. The chapter then moves on to address possible countermeasures for different aspects of the attack. The book consists of seven chapters that cover the following: the most pervasive and easily exploited vulnerabilities in web sites and web browsers; Structured Query Language (SQL) injection attacks; mistakes of server administrators that expose the web site to attack; brute force attacks; and logic attacks. The ways in which malicious software malware has been growing as a threat on the Web are also considered. This book is intended for information security professionals of all levels, as well as web application developers and recreational hackers. Knowledge is power, find out about the most dominant attacks currently waging war on computers and networks globally Discover the best ways to defend against these vicious attacks; step-by-step instruction shows you how Institute countermeasures, don’t be caught defenseless again, and learn techniques to make your computer and network impenetrable

The six volumes LNCS 11619-11624 constitute the refereed proceedings of the 19th International Conference on Computational

Science and Its Applications, ICCSA 2019, held in Saint Petersburg, Russia, in July 2019. The 64 full papers, 10 short papers and 259 workshop papers presented were carefully reviewed and selected form numerous submissions. The 64 full papers are organized in the following five general tracks: computational methods, algorithms and scientific applications; high performance computing and networks; geometric modeling, graphics and visualization; advanced and emerging applications; and information systems and technologies. The 259 workshop papers were presented at 33 workshops in various areas of computational sciences, ranging from computational science technologies to specific areas of computational sciences, such as software engineering, security, artificial intelligence and blockchain technologies.

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.

SQL in a Nutshell applies the eminently useful "Nutshell" format to Structured Query Language (SQL), the elegant--but complex--descriptive language that is used to create and manipulate large stores of data. For SQL programmers, analysts, and database administrators, the new second edition of SQL in a Nutshell is the essential date language reference for the world's top SQL database products. SQL in a Nutshell is a lean, focused, and thoroughly comprehensive reference for those who live in a deadline-driven world.This invaluable desktop quick reference drills down and documents every SQL command and how to use it in both commercial (Oracle, DB2, and Microsoft SQL Server) and open source implementations (PostgreSQL, and MySQL). It describes every command and reference and includes the command syntax (by vendor, if the syntax differs across implementations), a clear description, and practical examples that illustrate important concepts and uses. And it also explains how the leading commercial and open sources database product implement SQL. This wealth of information is packed into a succinct, comprehensive, and extraordinarily easy-to-use format that covers the SQL syntax of no less than 4 different databases.When you need fast, accurate, detailed, and up-to-date SQL information, SQL in a Nutshell, Second Edition will be the quick reference you'll reach for every time. SQL in a Nutshell is small enough to keep by your keyboard, and concise (as well as clearly organized) enough that you can look up the syntax you need quickly without having to wade through a lot of useless fluff. You won't want to work on a project involving SQL without it.

This book concentrates on a wide range of advances related to IT cybersecurity management. The topics covered in this book include, among others, management techniques in security, IT risk management, the impact of technologies and techniques on security management, regulatory techniques and issues, surveillance technologies, security policies, security for protocol management, location management, GOS management, resource management, channel management, and mobility management. The authors also discuss digital contents copyright protection, system security management, network security management, security management in network equipment, storage area networks (SAN) management, information security management, government security policy, web penetration testing, security operations, and vulnerabilities management. The authors introduce the concepts, tech-

niques, methods, approaches and trends needed by cybersecurity management specialists and educators for keeping current their cybersecurity management knowledge. Further, they provide a glimpse of future directions where cybersecurity management techniques, policies, applications, and theories are headed. The book is a rich collection of carefully selected and reviewed manuscripts written by diverse cybersecurity management experts in the listed fields and edited by prominent cybersecurity management researchers and specialists.

This book presents the proceedings of the 5th International Conference on Advanced Intelligent Systems and Informatics 2019 (AISI2019), which took place in Cairo, Egypt, from October 26 to 28, 2019. This international and interdisciplinary conference, which highlighted essential research and developments in the fields of informatics and intelligent systems, was organized by the Scientific Research Group in Egypt (SRGE). The book is divided into several sections, covering the following topics: machine learning and applications, swarm optimization and applications, robotic and control systems, sentiment analysis, e-learning and social media education, machine and deep learning algorithms, recognition and image processing, intelligent systems and applications, mobile computing and networking, cyber-physical systems and security, smart grids and renewable energy, and micro--grid and power systems.

A practical handbook to cybersecurity for both tech and non-tech professionals As reports of major data breaches fill the headlines, it has become impossible for any business, large or small, to ignore the importance of cybersecurity. Most books on the subject, however, are either too specialized for the non-technical professional or too general for positions in the IT trenches. Thanks to author Nadean Tanner's wide array of experience from teaching at a University to working for the Department of Defense, the Cybersecurity Blue Team Toolkit strikes the perfect balance of substantive and accessible, making it equally useful to those in IT or management positions across a variety of industries. This handy guide takes a simple and strategic look at best practices and tools available to both cybersecurity management and hands-on professionals, whether they be new to the field or looking to expand their expertise. Tanner gives comprehensive coverage to such crucial topics as security assessment and configuration, strategies for protection and defense, offensive measures, and remediation while aligning the concept with the right tool using the CIS Controls version 7 as a guide. Readers will learn why and how to use fundamental open source and free tools such as ping, tracert, PuTTY, pathping, sysinternals, NMAP, OpenVAS, Nexpose Community, OSSEC, Hamachi, InSSIDer, Nexpose Community, Wireshark, Solarwinds Kiwi Syslog Server, Metasploit, Burp, Clonezilla and many more. Up-to-date and practical cybersecurity instruction, applicable to both management and technical positions • Straightforward explanations of the theory behind cybersecurity best practices • Designed to be an easily navigated tool for daily use • Includes training appendix on Linux, how to build a virtual lab and glossary of key terms The Cybersecurity Blue Team Toolkit is an excellent resource for anyone working in digital policy as well as IT security professionals, technical analysts, program managers, and Chief Information and Technology Officers. This is one handbook that won't gather dust on the shelf, but re-

main a valuable reference at any career level, from student to executive.

This book features high-quality research papers presented at Second Doctoral Symposium on Computational Intelligence (DoSCI-2021), organized by Institute of Engineering and Technology (IET), AKTU, Lucknow, India, on 6 March 2021. This book discusses the topics such as computational intelligence, artificial intelligence, deep learning, evolutionary algorithms, swarm intelligence, fuzzy sets and vague sets, rough set theoretic approaches, quantum-inspired computational intelligence, hybrid computational intelligence, machine learning, computer vision, soft computing, distributed computing, parallel and grid computing, cloud computing, high-performance computing, biomedical computing, decision support and decision making.