Trusted Platform Module Tpm Intel

This book constitutes the refereed proceedings of the 6th International Conference on Trust and Trustworthy Computing, TRUST 2013, held in London, UK, in June 2013. There is a technical and a socio-economic track. The full papers presented, 14 and 5 respectively, were carefully reviewed from 39 in the technical track and 14 in the socio-economic track. Also included are 5 abstracts describing ongoing research. On the technical track the papers deal with issues such as key management, hypervisor usage, information flow analysis, trust in network measurement, random number generators, case studies that evaluate trust-based methods in practice, simulation environments for trusted platform modules, trust in applications running on mobile devices, trust across platform. Papers on the socio-economic track investigated, how trust is managed and perceived in online environments, and how the disclosure of personal data is perceived; and some papers probed trust issues across generations of users and for groups with special needs.

A Practical Guide to TPM 2.0Using the Trusted Platform Module in the New Age of SecurityApress

This book constitutes the proceedings of the 15th European Symposium on Computer Security held in Athens, Greece in September 2010. The 42 papers included in the book were carefully reviewed and selected from 201 papers. The articles are organized in topical sections on RFID and Privacy, Software Security, Cryptographic Protocols, Traffic Analysis, End-User Security, Formal Analysis, E-voting and Broadcast, Authentication, Access Control, Authorization and Attestation, Anonymity and Unlinkability, Network Security and Economics, as well as Secure Update, DOS and Intrustion Detection.

This 2-volume set constitutes the thoroughly refereed post-conference proceedings of the 10th International Conference on Security and Privacy in Communication Networks, SecureComm 2014, held in Beijing, China, in September 2014. The 27 regular and 17 short papers presented were carefully reviewed. It also presents 22 papers accepted for four workshops (ATCS, SSS, SLSS, DAPRO) in conjunction with the conference, 6 doctoral symposium papers and 8 poster papers. The papers are grouped in the following topics: security and privacy in wired, wireless, mobile, hybrid, sensor, ad hoc networks; network intrusion detection and prevention, firewalls, packet filters; malware, and distributed denial of service; communication privacy and anonymity; network and internet forensics techniques; public key infrastructures, key management, credential management; secure routing, naming/addressing, network management; security and privacy in pervasive and ubiquitous computing; security & privacy for emerging technologies: VoIP, peer-to-peer and overlay network systems; security & isolation in data center networks; security & isolation in software defined networking.

This book describes how to architect and design Internet of Things (loT) solutions that provide end-to-end security and privacy at scale. It is unique in its detailed coverage of threat analysis, protocol analysis, secure design principles, intelligent loT's impact on privacy, and the effect of usability on security. The book also unveils the impact of digital currency and the dark web on the loT-security economy. It's both informative and entertaining. "Filled with practical and relevant examples based on years of experience ... with lively discussions and storytelling related to loT security design flaws and

architectural issues."— Dr. James F. Ransome, Senior Director of Security Development Lifecycle (SOL) Engineering, Intel 'There is an absolute treasure trove of information within this book that will benefit anyone, not just the engineering community. This book has earned a permanent spot on my office bookshelf."— Erv Comer, Fellow of Engineering, Office of Chief Architect Zebra Technologies 'The importance of this work goes well beyond the engineer and architect. The IoT Architect's Guide to Attainable Security & Privacy is a crucial resource for every executive who delivers connected products to the market or uses connected products to run their business."— Kurt Lee, VP Sales and Strategic Alliances at PWNIE Express "If we collectively fail to follow the advice described here regarding loT security and Privacy, we will continue to add to our mounting pile of exploitable computing devices. The attackers are having a field day. Read this book, now."— Brook S.E. Schoenfield, Director of Advisory Services at IOActive, previously Master Security Architect at McAfee, and author of Securing Systems

Access to 3 hours of troubleshooting videos as well as PDFs of previous editions are available through product registration—see instructions in back pages of your eBook. For more than 25 years, Upgrading and Repairing PCs has been the world’s #1 guide to PC hardware: The single source for reliable information on how PCs work, troubleshooting and fixing problems, adding hardware, optimizing performance, and building new PCs. This 22nd edition offers beefed-up coverage of the newest hardware innovations and maintenance techniques, plus more than two hours of new video. Scott Mueller delivers practical answers about PC processors, mother-boards, buses, BIOSes, memory, SSD and HDD storage, video, audio, networks, Internet connectivity, power, and much more. You’ll find the industry’s best coverage of diagnostics, testing, and repair—plus cutting-edge discussions of improving PC performance via overclocking and other techniques. Mueller has taught thousands of professionals in person and millions more through his books and videos—nobody knows more about keeping PCs running perfectly. Whether you’re a professional technician, a small business owner trying to save money, or a home PC enthusiast, this is the only PC hardware book you need! NEW IN THIS EDITION The newest processors, including Intel’s latest Core i Haswell processors and AMD’s Kaveri core processors. Everything you need to know about the latest GPU technology from NVIDIA and AMD, including developments in OpenGL, DirectX, and Mantle. New firmware innovations like the InSyde BIOS, Back to BIOS buttons, and all the updated settings available for the newest processors and chipsets. The latest in updated home networking standards, from blazing fast 802.11ac Wi-Fi to HomeGrid and G.hn powerline networking. Ever larger storage, thanks to new technologies like helium-filled hard disks, shingled magnetic recording, and Cfast and XQD for flash memory. Emerging interfaces such as mSATA, USB 3.1, and M.2 Updated coverage of building PCs from scratch—from choosing and assembling hardware through BIOS setup and troubleshooting

Expanded into two volumes, the Second Edition of Springer’s Encyclopedia of Cryptography and Security brings the latest and most comprehensive coverage of the topic: Definitive information on cryptography and information security from highly regarded researchers Effective tool for professionals in many fields and researchers of all levels Extensive resource with more than 700 contributions in Second Edition 5643 references, more than twice the number of references that appear in the First Edition

With over 300 new entries, appearing in an A-Z format, the Encyclopedia of Cryptography and Security provides easy, intuitive access to information on all aspects of cryptography and security. As a critical enhancement to the First Edition's base of 464 entries, the information in the Encyclopedia is relevant for researchers and professionals alike. Topics for this comprehensive reference were elected, written, and peer-reviewed by a pool of distinguished researchers in the field. The Second Edition's editorial board now includes 34 scholars, which was expanded from 18 members in the First Edition. Representing the work of researchers from over 30 countries, the Encyclopedia is broad in scope, covering everything from authentication and identification to quantum cryptography and web security. The text's practical style is instructional, yet fosters investigation. Each area presents concepts, designs, and specific implementations. The highly-structured essays in this work include synonyms, a definition and discussion of the topic, bibliographies, and links to related literature. Extensive cross-references to other entries within the Encyclopedia support efficient, user-friendly searches for immediate access to relevant information. Key concepts presented in the Encyclopedia of Cryptography and Security include: Authentication and identification; Block ciphers and stream ciphers; Computational issues; Copy protection; Cryptanalysis and security; Cryptographic protocols; Electronic payment and digital certificates; Elliptic curve cryptography; Factorization algorithms and primality tests; Hash functions and MACs; Historical systems; Identity-based cryptography; Implementation aspects for smart cards and standards; Key management; Multiparty computations like voting schemes; Public key cryptography; Quantum cryptography; Secret sharing schemes; Sequences; Web Security. Topics covered: Data Structures, Cryptography and Information Theory; Data Encryption; Coding and Information Theory; Appl.Mathematics/Computational Methods of Engineering; Applications of Mathematics; Complexity. This authoritative reference will be published in two formats: print and online. The online edition features hyperlinks to cross-references, in addition to significant research.

A comprehensive guide for MCSA Exam 70-740, that will help you prepare from day one to earn the valuable Microsoft Certificate Key Features Leverage practice questions and mock tests to pass this certification with confidence Learn to Install Windows Servers,implement high availability, and monitor server environments Gain necessary skills to implement and configure storage and compute features Book Description MCSA: Windows Server 2016 certification is one of the most sought-after certifications for IT professionals, which includes working with Windows Server and performing administrative tasks around it. This book is aimed at the 70-740 certification and is part of Packt's three-book series on MCSA Windows Server 2016 certification, which covers Exam 70-740, Exam 70-741, and Exam 70-742. This book will cover exam objectives for the 70-740 exam, and starting from installing and configuring Windows Server 2016, Windows Server imaging and deployment to configuring and managing disks and volumes, implementing and configuring server storage and implementing Hyper-V. At the end of each chapter you will be provided test questions to revise your learnings which will boost your confidence in preparing for the actual certifications. By the end of this book, you will learn everything needed to pass the, MCSA Exam 70-740: Installation, Storage, and Compute with Windows Server 2016, certification. What you will learn Install Windows Server 2016 Upgrade and Migrate

servers and workloads Implement and configure server storage Install and configure Hyper-V Configure the virtual machine (VM) settings Configure Hyper-V storage Configure Hyper-V networking Who this book is for This book is ideal for system administrators interested in installing and configuring storage and compute features with Windows Sever 2016 and aiming to pass the 70-740 certification. Some experience with Windows Server in an enterprise environment is assumed.

"The inside story of how Microsoft overcame a $900 million write-down to become the hero of the PC industry"--Subtitle on cover.

This book provides an overview of modern boot firmware, including the Unified Extensible Firmware Interface (UEFI) and its associated EFI Developer Kit II (EDKII) firmware. The authors have each made significant contributions to developments in these areas. The reader will learn to use the latest developments in UEFI on modern hardware, including open source firmware and open hardware designs. The book begins with an exploration of interfaces exposed to higher-level software and operating systems, and commences to the left of the boot timeline, describing the flow of typical systems, beginning with the machine restart event. Software engineers working with UEFI will benefit greatly from this book, while specific sections of the book address topics relevant for a general audience: system architects, pre-operating-system application developers, operating system vendors (loader, kernel), independent hardware vendors (such as for plug-in adapters), and developers of end-user applications. As a secondary audience, project technical leaders or managers may be interested in this book to get a feel for what their engineers are doing. The reader will find: An overview of UEFI and underlying Platform Initialization (PI) specifications How to create UEFI applications and drivers Workflow to design the firmware solution for a modern platform Advanced usages of UEFI firmware for security and manageability

The Intel Safer Computing Initiative deals with computers/software.

As society rushes to digitize sensitive information and services, it is imperative to adopt adequate security protections. However, such protections fundamentally conflict with the benefits we expect from commodity computers. In other words, consumers and businesses value commodity computers because they provide good performance and an abundance of features at relatively low costs. Meanwhile, attempts to build secure systems from the ground up typically abandon such goals, and hence are seldom adopted. In this book, I argue that we can resolve the tension between security and features by leveraging the trust a user has in one device to enable her to securely use another commodity device or service, without sacrificing the performance and features expected of commodity systems. At a high level, we support this premise by developing techniques to allow a user to employ a small, trusted, portable device to securely learn what code is executing on her local computer. Rather than entrusting her data to the mountain of buggy code likely running on her computer, we construct an on-demand secure execution environment which can perform security-

sensitive tasks and handle private data in complete isolation from all other software (and most hardware) on the system. Meanwhile, non-security-sensitive software retains the same abundance of features and performance it enjoys today. Having established an environment for secure code execution on an individual computer, we then show how to extend trust in this environment to network elements in a secure and efficient manner. This allows us to reexamine the design of network protocols and defenses, since we can now execute code on endhosts and trust the results within the network. Lastly, we extend the user's trust one more step to encompass computations performed on a remote host (e.g., in the cloud). We design, analyze, and prove secure a protocol that allows a user to outsource arbitrary computations to commodity computers run by an untrusted remote party (or parties) who may subject the computers to both software and hardware attacks. Our protocol guarantees that the user can both verify that the results returned are indeed the correct results of the specified computations on the inputs provided, and protect the secrecy of both the inputs and outputs of the computations. These guarantees are provided in a non-interactive, asymptotically optimal (with respect to CPU and bandwidth) manner. Thus, extending a user's trust, via software, hardware, and cryptographic techniques, allows us to provide strong security protections for both local and remote computations on sensitive data, while still preserving the performance and features of commodity computers.

Thisvolumecontainsthe15paperspresentedinthetechnicalstrandoftheTrust 2009 conference, held in Oxford, UK in April 2009. Trust 2009 was the second international conference devoted to the technical and socio-economic aspects of trusted computing. The conference had two main strands, one devoted to technical aspects of trusted computing (addressed by these proceedings), and the other devoted to socio-economic aspects. Trust 2009 built on the successful Trust 2008 conference, held in Villach, Austria in March 2008. The proceedings of Trust 2008, containing 14 papers, were published in volume 4968 of the Lecture Notes in Computer Science series.

ThetechnicalstrandofTrust2009contained15originalpapersonthedesign and application of trusted computing. For these proceedings the papers have been divided into four main categories, namely: – Implementation of trusted computing – Attestation – PKI for trusted computing – Applications of trusted computing The 15 papers included here were selected from a total of 33 submissions. The refereeing process was rigorous, involving at least three (and mostly more) independent reports being prepared for each submission. We are very grateful to our hard-working and distinguished Program Committee for doing such an excellent job in a timely fashion. We believe that the result is a high-quality set of papers, some of which have been signi?cantly improved as a result of the refereeing process. We would also like to thank all the authors who submitted their papers to the technical strand of the Trust 2009 conference, all external referees, and all the attendees of the conference.

This book is your most complete source for in-depth information about Microsoft System Center Configuration Manager 2007! System Center Configuration Manager 2007 Unleashed is a comprehensive guide to System Center Configuration Manager (ConfigMgr) 2007. ConfigMgr 2007 helps you manage servers and desktops, integrates SMS 2003 “feature pack” functionality, and adds new capabilities. It enables you to assess, deploy, and update servers, clients, and devices across physical, virtual, distributed, and mobile environments, including clients that connect only over the Internet. This book guides you through designing, deploying, and configuring ConfigMgr 2007 with detailed information on topics such as capacity planning, security, site design and hierarchy planning, server placement, discovery, native mode, and using Windows Server 2008. You will learn how to tackle challenges such as setting up DCM and OSD, customizing inventory, creating queries and using query results, and configuring asset intelligence. Detailed information on how to… • Understand how ConfigMgr works • Plan your ConfigMgr deployment • Manage Windows Management Instrumentation (WMI) • Architect for performance • Install or migrate to ConfigMgr 2007 with Windows 2003 or Windows 2008 • Discover and manage clients • Create and distribute packages • Understand patch and compliance management • Create queries • Use reports • Deploy operating systems • Secure ConfigMgr 2007 • Perform site maintenance • Back up ConfigMgr components

The three-volume set, LNCS 11692, LNCS 11693, and LNCS 11694, constitutes the refereed proceedings of the 39th Annual International Cryptology Conference, CRYPTO 2019, held in Santa Barbara, CA, USA, in August 2019. The 81 revised full papers presented were carefully reviewed and selected from 378 submissions. The papers are organized in the following topical sections: Part I: Award papers; lattice-based ZK; symmetric cryptography; mathematical cryptanalysis; proofs of storage; non-malleable codes; SNARKs and blockchains; homomorphic cryptography; leakage models and key reuse. Part II: MPC communication complexity; symmetric cryptanalysis; (post) quantum cryptography; leakage resilience; memory hard functions and privacy amplification; attribute based encryption; foundations. Part III: Trapdoor functions; zero knowledge I; signatures and messaging; obfuscation; watermarking; secure computation; various topics; zero knowledge II; key exchange and broadcast encryption.

Platform Embedded Security Technology Revealed is an in-depth introduction to Intel’s platform embedded solution: the security and management engine. The engine is shipped inside most Intel platforms for servers, personal computers, tablets, and smartphones. The engine realizes advanced security and management functionalities and protects applications’ secrets and users’ privacy in a secure, light-weight, and inexpensive way. Besides native built-in features, it allows third-party software vendors to develop applications that take advantage of the security infrastructures offered by the engine. Intel’s security

and management engine is technologically unique and significant, but is largely unknown to many members of the tech communities who could potentially benefit from it. Platform Embedded Security Technology Revealed reveals technical details of the engine. The engine provides a new way for the computer security industry to resolve critical problems resulting from booming mobile technologies, such as increasing threats against confidentiality and privacy. This book describes how this advanced level of protection is made possible by the engine, how it can improve users' security experience, and how third-party vendors can make use of it. It's written for computer security professionals and researchers; embedded system engineers; and software engineers and vendors who are interested in developing new security applications on top of Intel's security and management engine. It's also written for advanced users who are interested in understanding how the security features of Intel's platforms work.

Software applications once held on local computers and servers are beginning to shift to the public Internet sphere, and private health information is no exception. The likelihood of placing once restricted and private health records "in the cloud" is increasing. Cloud Computing Applications for Quality Health Care Delivery focuses on cloud technologies that could affect quality in the healthcare field. Leading experts in this area offer their knowledge and contribute to the demystification of healthcare in the Cloud. This publication will prove to be a useful tool for undergraduate and graduate students of healthcare quality and management, healthcare managers, and industry professionals.

Private cloud computing enables you to consolidate diverse enterprise systems into one that is cloud-based and can be accessed by end-users seamlessly, regardless of their location or changes in overall demand. Expert authors Steve Smoot and Nam K. Tan distill their years of networking experience to describe how to build enterprise networks to create a private cloud. With their techniques you'll create cost-saving designs and increase the flexibility of your enterprise, while maintaining the security and control of an internal network. Private Cloud Computing offers a complete cloud architecture for enterprise networking by synthesizing WAN optimization, next-generation data centers, and virtualization in a network-friendly way, tying them together into a complete solution that can be progressively migrated to as time and resources permit. Describes next-generation data center architectures such as the virtual access-layer, the unified data center fabric and the "rack-and-roll" deployment model Provides an overview of cloud security and cloud management from the server virtualization perspective Presents real-world case studies, configuration and examples that allow you to easily apply practical know-how to your existing enterprise environment Offers effective private cloud computing solutions to simplify the costly and problematic challenge of enterprise networking and branch server consolidation

This book constitutes the proceedings of the 9th International Symposium on Cyberspace Safety and Security, CSS 2017, held in Xi'an, China in October

2017. The 31 full papers and 10 short papers presented in this volume were carefully reviewed and selected from 120 submissions. The papers focus on cyberspace safety and security such as authentication, access control, availability, integrity, privacy, confidentiality, dependability and sustainability issues of cyberspace.

"This book is a must have resource guide for anyone who wants to ... implement TXT within their environments. I wish we had this guide when our engineering teams were implementing TXT on our solution platforms!" John McAuley,EMC Corporation "This book details innovative technology that provides significant benefit to both the cloud consumer and the cloud provider when working to meet the ever increasing requirements of trust and control in the cloud." Alex Rodriguez, Expedient Data Centers "This book is an invaluable reference for understanding enhanced server security, and how to deploy and leverage computing environment trust to reduce supply chain risk." Pete Nicoletti. Virtustream Inc. Intel® Trusted Execution Technology (Intel TXT) is a new security technology that started appearing on Intel server platforms in 2010. This book explains Intel Trusted Execution Technology for Servers, its purpose, application, advantages, and limitations. This book guides the server administrator / datacenter manager in enabling the technology as well as establishing a launch control policy that he can use to customize the server's boot process to fit the datacenter's requirements. This book explains how the OS (typically a Virtual Machine Monitor or Hypervisor) and supporting software can build on the secure facilities afforded by Intel TXT to provide additional security features and functions. It provides examples how the datacenter can create and use trusted pools. With a foreword from Albert Caballero, the CTO at Trapezoid. For cloud users and providers alike, security is an everyday concern, yet there are very few books covering cloud security as a main subject. This book will help address this information gap from an Information Technology solution and usage-centric view of cloud infrastructure security. The book highlights the fundamental technology components necessary to build and enable trusted clouds. Here also is an explanation of the security and compliance challenges organizations face as they migrate mission-critical applications to the cloud, and how trusted clouds, that have their integrity rooted in hardware, can address these challenges. This book provides: Use cases and solution reference architectures to enable infrastructure integrity and the creation of trusted pools leveraging Intel Trusted Execution Technology (TXT). Trusted geo-location management in the cloud, enabling workload and data location compliance and boundary control usages in the cloud. OpenStack-based reference architecture of tenant-controlled virtual machine and workload protection in the cloud. A reference design to enable secure hybrid clouds for a cloud bursting use case, providing infrastructure visibility and control to organizations. "A valuable guide to the next generation of cloud security and hardware based root of trust. More than an explanation of the what and how, is the explanation of why. And why you can't afford to ignore it!"

—Vince Lubsey, Vice President, Product Development, Virtustream Inc. " Raghu provides a valuable reference for the new 'inside out' approach, where trust in hardware, software, and privileged users is never assumed—but instead measured, attested, and limited according to least privilege principles." —John Skinner, Vice President, HyTrust Inc. "Traditional parameter based defenses are in sufficient in the cloud. Raghu's book addresses this problem head-on by highlighting unique usage models to enable trusted infrastructure in this open environment. A must read if you are exposed in cloud." —Nikhil Sharma, Sr. Director of Cloud Solutions, Office of CTO, EMC Corporation

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 and 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.

The book summarizes key concepts and theories in trusted computing, e.g., TPM, TCM, mobile modules, chain of trust, trusted software stack etc, and discusses the configuration of trusted platforms and network connections. It also emphasizes the application of such technologies in practice, extending readers from computer science and information science researchers to industrial engineers.

Singapore's leading tech magazine gives its readers the power to decide with its informative articles and in-depth reviews.

Maximum PC is the magazine that every computer fanatic, PC gamer or content creator must read. Each and every issue is packed with punishing product reviews, insightful and innovative how-to stories and the illuminating technical articles that enthusiasts crave.

Trusting a computer for a security-sensitive task (such as checking email or banking online) requires the user to know something about the computer's state. We examine research on securely capturing a computer's state, and consider the utility of this information both for improving security on the local computer (e.g., to convince the user that her computer is not infected with malware) and for communicating a remote computer's state (e.g., to enable the

user to check that a web server will adequately protect her data). Although the recent "Trusted Computing" initiative has drawn both positive and negative attention to this area, we consider the older and broader topic of bootstrapping trust in a computer. We cover issues ranging from the wide collection of secure hardware that can serve as a foundation for trust, to the usability issues that arise when trying to convey computer state information to humans. This approach unifies disparate research efforts and highlights opportunities for additional work that can guide real-world improvements in computer security.

This book constitutes the refereed proceedings of the 19th International Symposium on Formal Methods, FM 2014, held in Singapore, May 2014. The 45 papers presented together with 3 invited talks were carefully reviewed and selected from 150 submissions. The focus of the papers is on the following topics: Interdisciplinary Formal Methods, Practical Applications of Formal Methods in Industrial and Research Settings, Experimental Validation of Tools and Methods as well as Construction and Evolution of Formal Methods Tools.

For more than 40 years, Computerworld has been the leading source of technology news and information for IT influencers worldwide. Computerworld's award-winning Web site (Computerworld.com), twice-monthly publication, focused conference series and custom research form the hub of the world's largest global IT media network.

This book defines the nature and scope of insider problems as viewed by the financial industry. This edited volume is based on the first workshop on Insider Attack and Cyber Security, IACS 2007. The workshop was a joint effort from the Information Security Departments of Columbia University and Dartmouth College. The book sets an agenda for an ongoing research initiative to solve one of the most vexing problems encountered in security, and a range of topics from critical IT infrastructure to insider threats. In some ways, the insider problem is the ultimate security problem.

The two-volume set of LNCS 6426/6427 constitutes the refereed proceedings of 3 confederated international conferences on CoopIS (Cooperative Information Systems), DOA (Distributed Objects and Applications) and ODBASE (Ontologies, DataBases and Applications of SEmantics). These conferences were held in October 2009 in Greece, in Hersonissos on the island of Crete. CoopIS is covering the applications of technologies in an enterprise context as workflow systems and knowledge management. DOA is covering the relevant infrastructure-enabling technologies and finally, OSBASe is covering WEB semantics, XML databases and ontologies. The 83 revised full papers presented together with 3 keynote talks were carefully reviewed and selected from a total of 223 submissions. Corresponding to the OTM main conferences the papers are organized in topical sections on process models and management, modeling of cooperation, services computing, information processing and management, human-based cooperative systems, ontology and workflow challenges, access control, authentication and policies, secure architectures, cryptography, data storage and processing, transaction and event management, virtualization performance, risk and scalability, cloud and distributed system security, reactivity and semantic data, ontology mapping and semantic similarity, domain specific ontologies.

Businesses constantly face online hacking threats or security breaches in their online mainframe that expose sensitive information to the wrong audience. Companies look to store their data in a separate location, distancing the availability of the information and reducing the risk of data breaches. Modern organizations need to remain vigilant against insider attacks, cloud computing risks, and security flaws within their mainframe. Detection and Mitigation of Insider Attacks in a Cloud Infrastructure: Emerging Research and Opportunities is an essential reference source that discusses maintaining a secure management of sensitive data, and intellectual property and provides a robust security algorithm on consumer data. Featuring research on topics such as public cryptography, security principles, and trustworthy computing, this book is ideally designed for IT professionals, business managers, researchers, students,

and professionals seeking coverage on preventing and detecting the insider attacks using trusted cloud computing techniques.

Trusted Platform Modules (TPMs) are small, inexpensive chips which provide a limited set of security functions. They are most commonly found as a motherboard component in laptops and desktops aimed at the corporate or government markets, but can also be found in many consumer-grade machines and servers or purchased as independent components. This book describes the primary uses for TPMs and practical considerations such as: when TPMs can and should be used, when they shouldn't be used, what advantages they provide and how to benefit from them. Topics covered include: * When to use a TPM * TPM concepts and functionality * Programming introduction * Provisioning: getting the TPM ready to use * First steps: TPM keys, machine authentication, data protection, attestation * Other TPM features * Software and specifications * Troubleshooting * Appendices contain basic cryptographic concepts, command equivalence, requirements charts and complete code samples.

The TCPA 1.0 specification finally makes it possible to build low-cost computing platforms on a rock-solid foundation of trust. In Trusted Computing Platforms, leaders of the TCPA initiative place it in context, offering essential guidance for every systems developer and decision-maker. They explain what trusted computing platforms are, how they work, what applications they enable, and how TCPA can be used to protect data, software environments, and user privacy alike.

A Practical Guide to TPM 2.0: Using the Trusted Platform Module in the New Age of Security is a straight-forward primer for developers. It shows security and TPM concepts, demonstrating their use in real applications that the reader can try out. Simply put, this book is designed to empower and excite the programming community to go out and do cool things with the TPM. The approach is to ramp the reader up quickly and keep their interest.A Practical Guide to TPM 2.0: Using the Trusted Platform Module in the New Age of Security explains security concepts, describes the TPM 2.0 architecture, and provides code and pseudo-code examples in parallel, from very simple concepts and code to highly complex concepts and pseudo-code. The book includes instructions for the available execution environments and real code examples to get readers up and talking to the TPM quickly. The authors then help the users expand on that with pseudo-code descriptions of useful applications using the TPM.

Responsible Genomic Data Sharing: Challenges and Approaches brings together international experts in genomics research, bioinformatics and digital security who analyze common challenges in genomic data sharing, privacy preserving technologies, and best practices for large-scale genomic data sharing. Practical case studies, including the Global Alliance for Genomics and Health, the Beacon Network, and the Matchmaker Exchange, are discussed in-depth, illuminating pathways forward for new genomic data sharing efforts across research and clinical practice, industry and academia. Addresses privacy preserving technologies and how they can be applied to enable responsible genomic data sharing Employs illustrative case studies and analyzes emerging genomic data sharing efforts, common challenges and lessons learned Features chapter contributions from international experts in responsible approaches to genomic

data sharing

This handbook offers a comprehensive overview of cloud computing security technology and implementation while exploring practical solutions to a wide range of cloud computing security issues. As more organizations use cloud computing and cloud providers for data operations, the need for proper security in these and other potentially vulnerable areas has become a global priority for organizations of all sizes. Research efforts from academia and industry, as conducted and reported by experts in all aspects of security related to cloud computing, are gathered within one reference guide. Features • Covers patching and configuration vulnerabilities of a cloud server • Evaluates methods for data encryption and long-term storage in a cloud server • Demonstrates how to verify identity using a certificate chain and how to detect inappropriate changes to data or system configurations John R. Vacca is an information technology consultant and internationally known author of more than 600 articles in the areas of advanced storage, computer security, and aerospace technology. John was also a configuration management specialist, computer specialist, and the computer security official (CSO) for NASA's space station program (Freedom) and the International Space Station Program from 1988 until his retirement from NASA in 1995.