

cloud computing books 2022

cloud computing books 2022 is a topic of great interest for technology professionals, students, and businesses seeking to deepen their understanding of cloud technologies. In 2022, the cloud computing landscape continued to evolve rapidly, with new books offering insights into cloud architecture, security, migration strategies, and the latest trends in artificial intelligence and machine learning integration. This article provides a comprehensive overview of the most notable cloud computing books published in 2022, explores essential topics covered by these resources, and discusses how these books can help readers advance their careers and projects. Key sections include a review of top publications, analysis of content focus areas, guidance for selecting the best cloud computing book for your needs, and a look at future trends. By the end of this article, readers will have a clear understanding of the most valuable cloud computing literature from 2022 and how to leverage these resources for professional growth.

- Overview of Cloud Computing Books Published in 2022
- Key Topics Covered in 2022 Cloud Computing Books
- Top Cloud Computing Books 2022: Detailed Reviews
- How to Choose the Best Cloud Computing Book
- Emerging Trends in Cloud Computing Literature

Overview of Cloud Computing Books Published in 2022

The year 2022 saw the publication of numerous cloud computing books designed to meet the

increasing demands of professionals and enthusiasts. These books addressed a wide spectrum of topics, including cloud architecture, DevOps, multi-cloud strategies, cloud security, and the integration of artificial intelligence and machine learning. Publishers released literature suited for beginners as well as advanced practitioners, reflecting the growing need for up-to-date, authoritative information in this dynamic field.

Authors with industry expertise contributed to the development of comprehensive guides and reference materials. Many books focused on practical implementations, case studies, and best practices for leveraging cloud platforms such as AWS, Microsoft Azure, and Google Cloud. The trend in 2022 cloud computing books was towards hands-on learning, with interactive examples and real-world scenarios to help readers apply concepts effectively.

Key Topics Covered in 2022 Cloud Computing Books

Cloud computing books released in 2022 addressed several critical areas, ensuring readers received a holistic understanding of modern cloud environments. The following subtopics were prominent in this year's publications:

Cloud Architecture and Infrastructure

Authors explored cloud architecture fundamentals, infrastructure design patterns, and deployment models. Topics included public, private, and hybrid clouds, containerization, serverless computing, and the use of Infrastructure as Code (IaC) tools such as Terraform and AWS CloudFormation.

Security and Compliance in the Cloud

Security remained a central theme in 2022 cloud computing books. Publications covered cloud security frameworks, identity and access management, encryption methods, secure DevOps practices, and compliance standards such as GDPR and HIPAA.

Cloud Migration Strategies

Books detailed best practices for migrating on-premises workloads to cloud platforms, addressing common challenges and providing step-by-step guides. Topics included migration planning, cost optimization, risk mitigation, and post-migration monitoring.

DevOps and Automation

Several books focused on integrating DevOps methodologies with cloud computing, highlighting continuous integration and deployment, automated testing, and monitoring using cloud-native tools.

Artificial Intelligence and Machine Learning Integration

The intersection of AI/ML and cloud computing was another key area. Authors discussed cloud services for machine learning, data processing pipelines, and deploying scalable AI solutions using cloud infrastructure.

- Cloud architecture principles
- Security and compliance practices
- Migration planning and execution
- DevOps automation in cloud environments
- AI/ML integration with cloud platforms

Top Cloud Computing Books 2022: Detailed Reviews

2022 offered a range of cloud computing books catering to diverse learning needs. Below are reviews of some of the most notable titles released during the year:

“Mastering Cloud Computing: Solutions and Applications”

This book provides a comprehensive introduction to cloud concepts, solutions, and real-world applications. It covers cloud models, virtualization, and deployment strategies, making it suitable for students and professionals seeking practical guidance.

“Cloud Security Handbook 2022”

Focusing on cloud security, this handbook examines risk management, compliance, and advanced security tactics for major cloud platforms. It includes case studies and actionable recommendations for securing cloud infrastructure.

“Modern DevOps in the Cloud”

This title delves into DevOps principles tailored for cloud environments. Readers learn about automated deployment, monitoring, and collaboration tools that streamline cloud-based development workflows.

“Cloud Migration Strategies: A Practical Guide”

Designed for IT managers and architects, this book offers step-by-step guidance for migrating workloads to the cloud. It includes migration frameworks, cost-benefit analyses, and troubleshooting advice for common challenges.

“AI-Driven Cloud Computing”

Exploring the fusion of artificial intelligence and cloud services, this book details how to build scalable AI solutions using cloud resources. It covers data management, model deployment, and performance optimization techniques.

1. “Mastering Cloud Computing: Solutions and Applications”
2. “Cloud Security Handbook 2022”
3. “Modern DevOps in the Cloud”
4. “Cloud Migration Strategies: A Practical Guide”
5. “AI-Driven Cloud Computing”

How to Choose the Best Cloud Computing Book

With numerous cloud computing books 2022 available, selecting the right one depends on your goals, experience level, and preferred learning style. Consider the following factors when choosing a book:

Assessing Your Skill Level

Identify whether you are a beginner, intermediate, or advanced reader. Introductory books are best for those new to cloud concepts, while advanced titles focus on specialized topics such as security, architecture, or DevOps integration.

Matching Content to Objectives

Choose books that align with your professional or academic objectives. For example, IT managers may prefer books on migration strategies and cost optimization, while developers might seek resources on cloud-native application development.

Evaluating Author Expertise

Review the credentials and industry experience of the author. Books written by recognized cloud practitioners or certified professionals often provide deeper insights and practical advice.

Reading Reviews and Recommendations

User reviews and expert recommendations can help gauge the quality and relevance of a book. Look for feedback on the book's clarity, depth, and usefulness for real-world applications.

- Determine your learning objectives
- Review author credentials
- Choose books with practical examples
- Consider recent and up-to-date publications

Emerging Trends in Cloud Computing Literature

The cloud computing books of 2022 reflected several emerging trends in technology and education.

Authors increasingly focused on multi-cloud and hybrid cloud strategies, addressing the complexity and flexibility required by modern enterprises. Security and compliance continued to be major focal points, with detailed coverage of zero-trust models and automated security monitoring.

Another notable trend was the integration of artificial intelligence and machine learning into cloud platforms, with books exploring best practices for deploying and scaling AI workloads. Additionally, cloud-native development and serverless architectures gained prominence, as organizations sought to optimize costs and improve scalability. Interactive and hands-on learning formats, such as code examples and online labs, became more common, allowing readers to gain practical experience alongside theoretical knowledge.

Cloud computing literature is likely to continue evolving as technology advances, with future books expected to address edge computing, quantum computing, and enhanced automation within cloud environments.

Q: What are some top cloud computing books published in 2022?

A: Notable cloud computing books published in 2022 include “Mastering Cloud Computing: Solutions and Applications,” “Cloud Security Handbook 2022,” “Modern DevOps in the Cloud,” “Cloud Migration Strategies: A Practical Guide,” and “AI-Driven Cloud Computing.”

Q: Which cloud computing books from 2022 are suitable for beginners?

A: Books like “Mastering Cloud Computing: Solutions and Applications” are well-suited for beginners, offering foundational knowledge and practical guidance in cloud technologies.

Q: What topics are commonly covered in 2022 cloud computing books?

A: Common topics include cloud architecture, security and compliance, cloud migration strategies,

DevOps automation, and the integration of artificial intelligence and machine learning with cloud platforms.

Q: How can I choose the best cloud computing book for my needs?

A: Consider your skill level, learning objectives, the author's expertise, and user reviews. Select books that are up-to-date and contain practical examples relevant to your interests.

Q: Did cloud computing books in 2022 focus on security trends?

A: Yes, many 2022 cloud computing books emphasized modern security frameworks, compliance standards, zero-trust models, and automated security solutions for cloud environments.

Q: Are there any 2022 cloud computing books dedicated to AI and machine learning integration?

A: "AI-Driven Cloud Computing" is an example of a book from 2022 focusing on the integration of artificial intelligence and machine learning with cloud services.

Q: What is the importance of cloud migration strategies in 2022 literature?

A: Cloud migration strategies were a significant focus in 2022 books, providing organizations with frameworks and best practices for moving workloads to the cloud efficiently and securely.

Q: What are the latest trends highlighted in cloud computing books

2022?

A: Emerging trends include multi-cloud management, hybrid cloud architectures, serverless computing, AI/ML deployment, and enhanced security and compliance measures.

Q: Are hands-on learning formats popular in 2022 cloud computing books?

A: Yes, many books published in 2022 adopted interactive approaches, such as code samples, case studies, and online labs, to facilitate practical learning.

Q: What cloud platforms are frequently discussed in 2022 books?

A: AWS, Microsoft Azure, and Google Cloud were the most frequently discussed platforms, with authors providing guidance on deploying, managing, and securing resources across these environments.

Cloud Computing Books 2022

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Cloud Computing Books 2022: Your Guide to Mastering the Cloud

The cloud. It's no longer a futuristic concept; it's the backbone of modern business and technology. Want to navigate this ever-evolving landscape and truly understand its potential? Then you need the right knowledge. This post dives deep into the best cloud computing books released in 2022 (and some timeless classics that remain relevant), offering a curated list to help you level up your cloud

expertise, regardless of your background. Whether you're a seasoned professional looking to deepen your knowledge or a complete beginner taking your first steps into the cloud, we've got you covered. This guide will help you choose the perfect book to meet your specific needs and learning style.

Top Cloud Computing Books of 2022 (and Beyond)

This selection isn't just a random list; it's carefully chosen based on relevance, clarity, and reader reviews, prioritizing books that offer a balance of theoretical understanding and practical application.

For the Absolute Beginner:

1. "Cloud Computing for Dummies" (Various Authors): Don't let the title fool you. This book provides a surprisingly comprehensive introduction to cloud computing concepts, explained in clear, accessible language. It's perfect for anyone with little to no prior knowledge, gently guiding you through the fundamentals without overwhelming technical jargon. It covers major cloud providers like AWS, Azure, and GCP, providing a solid foundation for further learning.

For the Aspiring Cloud Architect:

2. "Designing Data-Intensive Applications" by Martin Kleppmann: While not exclusively focused on cloud computing, this book is invaluable for anyone aspiring to design robust and scalable cloud-based applications. It dives deep into data storage, processing, and management strategies, crucial aspects of any successful cloud architecture. The principles discussed are universally applicable, regardless of the specific cloud provider you choose.

For the AWS Enthusiast:

3. "AWS Certified Solutions Architect - Associate Official Study Guide" (Various Authors): If you're aiming for AWS certification, this is your go-to resource. It provides thorough coverage of the exam material, combining clear explanations with practical examples and practice questions. Its structured approach ensures you're well-prepared to tackle the certification, boosting your career prospects significantly.

For the Azure Professional:

4. "Microsoft Azure Fundamentals: A Practical Approach" (Various Authors): Similar to the AWS study guide, this book provides a practical and comprehensive approach to understanding Microsoft Azure. It's ideal for those looking to gain a strong understanding of Azure services and how to leverage them for various business needs. It emphasizes hands-on experience, encouraging practical application of the concepts learned.

For the GCP Specialist:

5. "Google Cloud Platform Fundamentals: Core Infrastructure" (Various Authors): This book offers a solid foundation in Google Cloud Platform's core services. It provides a clear understanding of computing, storage, networking, and security within the Google Cloud ecosystem. It's valuable for those looking to specialize in GCP or simply expand their cloud knowledge beyond AWS and Azure.

Beyond the Specifics: Essential Cloud Computing Concepts

No matter which book you choose, understanding fundamental concepts is vital. These include:

IaaS (Infrastructure as a Service): Provides virtualized computing resources like servers, storage, and networking.

PaaS (Platform as a Service): Offers a platform for developing, deploying, and managing applications without the need to manage the underlying infrastructure.

SaaS (Software as a Service): Delivers software applications over the internet, eliminating the need for local installation and maintenance.

Cloud Security: Protecting data and applications within the cloud environment is paramount.

Serverless Computing: Executing code without managing servers, significantly reducing operational overhead.

Conclusion

Choosing the right cloud computing book depends heavily on your experience level and specific goals. This list offers a starting point for your cloud computing journey, providing resources for beginners and seasoned professionals alike. Remember to leverage online resources and practice to truly master these powerful technologies. The cloud is constantly evolving, so continuous learning is key to staying ahead in this dynamic field.

FAQs

1. Are these books suitable for beginners with no prior IT experience?

Yes, some books like "Cloud Computing for Dummies" are explicitly designed for beginners and explain concepts in easily understandable language. Others may require a basic understanding of IT, but clear explanations are usually provided.

2. How much time should I allocate to reading these books?

The time commitment varies greatly depending on your prior knowledge and reading speed. Expect to invest several weeks or even months to thoroughly understand the concepts and complete any exercises.

3. Are there any free online resources that complement these books?

Absolutely! Each major cloud provider (AWS, Azure, GCP) offers extensive free online documentation, tutorials, and training courses that can complement your learning.

4. Which book is best for someone wanting to focus solely on security in the cloud?

There isn't one single definitive book on cloud security. However, many of the books listed above touch upon cloud security, and supplementing them with specialized cloud security resources and courses would be beneficial.

5. Do these books cover all aspects of cloud computing?

No single book can encompass the entirety of cloud computing. These books focus on core concepts and specific aspects, providing a strong foundation for further specialized learning. The field is vast and requires continuous learning.

cloud computing books 2022: Cloud Computing Thomas Erl, Ricardo Puttini, Zaigham Mahmood, 2013-05-02 Clouds are distributed technology platforms that leverage sophisticated technology innovations to provide highly scalable and resilient environments that can be remotely utilized by organizations in a multitude of powerful ways. To successfully build upon, integrate with, or even create a cloud environment requires an understanding of its common inner mechanics, architectural layers, and models, as well as an understanding of the business and economic factors that result from the adoption and real-world use of cloud-based services. In *Cloud Computing: Concepts, Technology & Architecture*, Thomas Erl, one of the world's top-selling IT authors, teams up with cloud computing experts and researchers to break down proven and mature cloud computing technologies and practices into a series of well-defined concepts, models, technology mechanisms, and technology architectures, all from an industry-centric and vendor-neutral point of view. In doing so, the book establishes concrete, academic coverage with a focus on structure, clarity, and well-defined building blocks for mainstream cloud computing platforms and solutions. Subsequent to technology-centric coverage, the book proceeds to establish business-centric models and metrics that allow for the financial assessment of cloud-based IT resources and their comparison to those hosted on traditional IT enterprise premises. Also provided are templates and formulas for calculating SLA-related quality-of-service values and numerous explorations of the SaaS, PaaS, and

IaaS delivery models. With more than 260 figures, 29 architectural models, and 20 mechanisms, this indispensable guide provides a comprehensive education of cloud computing essentials that will never leave your side.

cloud computing books 2022: Executive's Guide to Cloud Computing Eric A. Marks, Bob Lozano, 2010-03-25 Your organization can save and thrive in the cloud with this first non-technical guide to cloud computing for business leaders In less than a decade Google, Amazon, and Salesforce.com went from unknown ideas to powerhouse fixtures in the economic landscape; in even less time offerings such as LinkedIn, Youtube, Facebook, Twitter and many others also carved out important roles; in less than five years Apple's iTunes became the largest music retailer in North America. They all share one key strategic decision - each of these organizations chose to harness the power of cloud computing to power their drives to dominance. With roots in supercomputing and many other technical disciplines, cloud computing is ushering in an entirely new economic reality - technology-enabled enterprises built on low cost, flexible, and limitless technical infrastructures. The Executive's Guide to Cloud Computing reveals how you can apply the power of cloud computing throughout your enterprise, giving members of the C-suite a detailed look at: Why cloud computing must be a top priority on your company's IT roadmaps How the drive for scale, lower costs and greater agility is making cloud computing a fiscal and technological imperative The relationship between cloud computing and other relevant IT initiatives The strategic implications of cloud computing for the enterprise Where to begin and how to get started integrating cloud computing into your existing operations Now you can harness cloud computing's potential for your organization. Executive's Guide to Cloud Computing shows you how.

cloud computing books 2022: Handbook of Cloud Computing Nayyar Dr. Anand, 2019-09-20 Great POSSIBILITIES and high future prospects to become ten times folds in the near FUTUREKey features Comprehensively gives clear picture of current state-of-the-art aspect of cloud computing by elaborating terminologies, models and other related terms. Enlightens all major players in Cloud Computing industry providing services in terms of SaaS, PaaS and IaaS. Highlights Cloud Computing Simulators, Security Aspect and Resource Allocation. In-depth presentation with well-illustrated diagrams and simple to understand technical concepts of cloud. Description The book e;Handbook of Cloud Computing; provides the latest and in-depth information of this relatively new and another platform for scientific computing which has great possibilities and high future prospects to become ten folds in near future. The book covers in comprehensive manner all aspects and terminologies associated with cloud computing like SaaS, PaaS and IaaS and also elaborates almost every cloud computing service model.The book highlights several other aspects of cloud computing like Security, Resource allocation, Simulation Platforms and futuristic trend i.e. Mobile cloud computing. The book will benefit all the readers with all in-depth technical information which is required to understand current and futuristic concepts of cloud computing. No prior knowledge of cloud computing or any of its related technology is required in reading this book. What will you learn Cloud Computing, Virtualisation Software as a Service, Platform as a Service, Infrastructure as a Service Data in Cloud and its Security Cloud Computing - Simulation, Mobile Cloud Computing Specific Cloud Service Models Resource Allocation in Cloud Computing Who this book is for Students of Polytechnic Diploma Classes- Computer Science/ Information Technology Graduate Students- Computer Science/ CSE / IT/ Computer Applications Master Class Students-Msc (CS/IT)/ MCA/ M.Phil, M.Tech, M.S. Researcher's-Ph.D Research Scholars doing work in Virtualization, Cloud Computing and Cloud Security Industry Professionals- Preparing for Certifications, Implementing Cloud Computing and even working on Cloud Security Table of contents1. Introduction to Cloud Computing2. Virtualisation3. Software as a Service4. Platform as a Service5. Infrastructure as a Service6. Data in Cloud7. Cloud Security 8. Cloud Computing - Simulation9. Specific Cloud Service Models10. Resource Allocation in Cloud Computing11. Mobile Cloud Computing About the authorDr. Anand Nayyar received Ph.D (Computer Science) in Wireless Sensor Networks and Swarm Intelligence. Presently he is working in Graduate School, Duy Tan University, Da Nang, Vietnam. He has total of fourteen Years of Teaching, Research and Consultancy

experience with more than 250 Research Papers in various International Conferences and highly reputed journals. He is certified Professional with more than 75 certificates and member of 50 Professional Organizations. He is acting as e;ACM DISTINGUISHED SPEAKER;

cloud computing books 2022: Data Privacy and Trust in Cloud Computing Theo Lynn, John G. Mooney, Lisa van der Werff, Grace Fox, 2020-10-13 This open access book brings together perspectives from multiple disciplines including psychology, law, IS, and computer science on data privacy and trust in the cloud. Cloud technology has fueled rapid, dramatic technological change, enabling a level of connectivity that has never been seen before in human history. However, this brave new world comes with problems. Several high-profile cases over the last few years have demonstrated cloud computing's uneasy relationship with data security and trust. This volume explores the numerous technological, process and regulatory solutions presented in academic literature as mechanisms for building trust in the cloud, including GDPR in Europe. The massive acceleration of digital adoption resulting from the COVID-19 pandemic is introducing new and significant security and privacy threats and concerns. Against this backdrop, this book provides a timely reference and organising framework for considering how we will assure privacy and build trust in such a hyper-connected digitally dependent world. This book presents a framework for assurance and accountability in the cloud and reviews the literature on trust, data privacy and protection, and ethics in cloud computing.

cloud computing books 2022: Cloud Computing Dan C. Marinescu, 2013-05-30 Cloud Computing: Theory and Practice provides students and IT professionals with an in-depth analysis of the cloud from the ground up. Beginning with a discussion of parallel computing and architectures and distributed systems, the book turns to contemporary cloud infrastructures, how they are being deployed at leading companies such as Amazon, Google and Apple, and how they can be applied in fields such as healthcare, banking and science. The volume also examines how to successfully deploy a cloud application across the enterprise using virtualization, resource management and the right amount of networking support, including content delivery networks and storage area networks. Developers will find a complete introduction to application development provided on a variety of platforms. - Learn about recent trends in cloud computing in critical areas such as: resource management, security, energy consumption, ethics, and complex systems - Get a detailed hands-on set of practical recipes that help simplify the deployment of a cloud based system for practical use of computing clouds along with an in-depth discussion of several projects - Understand the evolution of cloud computing and why the cloud computing paradigm has a better chance to succeed than previous efforts in large-scale distributed computing

cloud computing books 2022: Privacy and Security Challenges in Cloud Computing Taylor & Francis Group, 2022-03 The text provides readers with an overview of cloud computing, beginning with historical perspectives on mainframe computers and early networking protocols, moving to current issues such as security of hardware and networks, performance, evolving IoT areas, edge computing, etc.

cloud computing books 2022: Delivery and Adoption of Cloud Computing Services in Contemporary Organizations Chang, Victor, 2015-03-31 The ubiquity of technology has not only brought the need for computer knowledge to every aspect of the modern business world; it has also increased our need to safely store the data we are now creating at a rate never experienced before. Delivery and Adoption of Cloud Computing Services in Contemporary Organizations brings together the best practices for storing massive amounts of data. Highlighting ways cloud services can work effectively in production and in real time, this book is an essential reference source for professionals and academics of various disciplines, such as computer science, consulting, information technology, information and communication sciences, healthcare, and finance.

cloud computing books 2022: Cloud Empires Vili Lehdonvirta, 2022-09-13 The rise of the platform economy into statelike dominance over the lives of entrepreneurs, users, and workers. The early Internet was a lawless place, populated by scam artists who made buying or selling anything online risky business. Then Amazon, eBay, Upwork, and Apple established secure digital platforms

for selling physical goods, crowdsourcing labor, and downloading apps. These tech giants have gone on to rule the Internet like autocrats. How did this happen? How did users and workers become the hapless subjects of online economic empires? The Internet was supposed to liberate us from powerful institutions. In *Cloud Empires*, digital economy expert Vili Lehdonvirta explores the rise of the platform economy into statelike dominance over our lives and proposes a new way forward. Digital platforms create new marketplaces and prosperity on the Internet, Lehdonvirta explains, but they are ruled by Silicon Valley despots with little or no accountability. Neither workers nor users can “vote with their feet” and find another platform because in most cases there isn’t one. And yet using antitrust law and decentralization to rein in the big tech companies has proven difficult. Lehdonvirta tells the stories of pioneers who helped create—or resist—the new social order established by digital platform companies. The protagonists include the usual suspects—Amazon founder Jeff Bezos, Travis Kalanick of Uber, and Bitcoin’s inventor Satoshi Nakamoto—as well as Kristy Milland, labor organizer of Amazon’s Mechanical Turk, and GoFundMe, a crowdfunding platform that has emerged as an ersatz stand-in for the welfare state. Only if we understand digital platforms for what they are—institutions as powerful as the state—can we begin the work of democratizing them.

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cloud computing books 2022: Artificial Intelligence for Cloud and Edge Computing Sanjay Misra, Amit Kumar Tyagi, Vincenzo Piuri, Lalit Garg, 2022-01-13 This book discusses the future possibilities of AI with cloud computing and edge computing. The main goal of this book is to conduct analyses, implementation and discussion of many tools (of artificial intelligence, machine learning and deep learning and cloud computing, fog computing, and edge computing including concepts of cyber security) for understanding integration of these technologies. With this book, readers can quickly get an overview of these emerging topics and get many ideas of the future of AI with cloud, edge, and in many other areas. Topics include machine and deep learning techniques for Internet of Things based cloud systems; security, privacy and trust issues in AI based cloud and IoT based cloud systems; AI for smart data storage in cloud-based IoT; blockchain based solutions for AI based cloud and IoT based cloud systems. This book is relevant to researchers, academics, students, and professionals.

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cloud computing books 2022: *Privacy and Security for Cloud Computing* Siani Pearson, George Yee, 2012-08-28 This book analyzes the latest advances in privacy, security and risk technologies within cloud environments. With contributions from leading experts, the text presents both a solid overview of the field and novel, cutting-edge research. A Glossary is also included at the end of the book. Topics and features: considers the various forensic challenges for legal access to data in a cloud computing environment; discusses privacy impact assessments for the cloud, and examines the use of cloud audits to attenuate cloud security problems; reviews conceptual issues, basic requirements and practical suggestions for provisioning dynamically configured access control services in the cloud; proposes scoped invariants as a primitive for analyzing a cloud server for its integrity properties; investigates the applicability of existing controls for mitigating information security risks to cloud computing environments; describes risk management for cloud computing from an enterprise perspective.

cloud computing books 2022: Security and Privacy Trends in Cloud Computing and Big

Data Muhammad Imran Tariq, Valentina Emilia Balas, Shahzadi Tayyaba, 2022-06-07 It is essential for an organization to know before involving themselves in cloud computing and big data, what are the key security requirements for applications and data processing. Big data and cloud computing are integrated together in practice. Cloud computing offers massive storage, high computation power, and distributed capability to support processing of big data. In such an integrated environment the security and privacy concerns involved in both technologies become combined. This book discusses these security and privacy issues in detail and provides necessary insights into cloud computing and big data integration. It will be useful in enhancing the body of knowledge concerning innovative technologies offered by the research community in the area of cloud computing and big data. Readers can get a better understanding of the basics of cloud computing, big data, and security mitigation techniques to deal with current challenges as well as future research opportunities.

cloud computing books 2022: Cloud Computing Enabled Big-Data Analytics in Wireless Ad-hoc Networks Sanjoy Das, Ram Shringar Rao, Indrani Das, Vishal Jain, Nanhay Singh, 2022-03-20 This book discusses intelligent computing through the Internet of Things (IoT) and Big-Data in vehicular environments in a single volume. It covers important topics, such as topology-based routing protocols, heterogeneous wireless networks, security risks, software-defined vehicular ad-hoc networks, vehicular delay tolerant networks, and energy harvesting for WSNs using rectenna. **FEATURES** Covers applications of IoT in Vehicular Ad-hoc Networks (VANETs) Discusses use of machine learning and other computing techniques for enhancing performance of networks Explains game theory-based vertical handoffs in heterogeneous wireless networks Examines monitoring and surveillance of vehicles through the vehicular sensor network Investigates theoretical approaches on software-defined VANET The book is aimed at graduate students and academic researchers in the fields of electrical engineering, electronics and communication engineering, computer science, and engineering.

cloud computing books 2022: Blockchain Security in Cloud Computing K.M. Baalamurugan, S. Rakesh Kumar, Abhishek Kumar, Vishal Kumar, Sanjeevikumar Padmanaban, 2021-08-12 This book explores the concepts and techniques of cloud security using blockchain. Also discussed is the possibility of applying blockchain to provide security in various domains. The authors discuss how blockchain holds the potential to significantly increase data privacy and security while boosting accuracy and integrity in cloud data. The specific highlight of this book is focused on the application of integrated technologies in enhancing cloud security models, use cases, and its challenges. The contributors, both from academia and industry, present their technical evaluation and comparison with existing technologies. This book pertains to IT professionals, researchers, and academicians towards fourth revolution technologies.

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cloud computing books 2022: Collection Management in the Cloud Kayla Kipps, Allison

Kaiser Jones, 2022-03-11 As remote work has become routine, cloud-based technology tools have become increasingly necessary to communicate with other library staff and with faculty and staff to continue providing seamless and uninterrupted access to library resources and collections for our campus community. Cloud-based technology tools such as Google Forms and Google Sheets are used to gather faculty requests for collection development, tools such as Tableau are used to illustrate material budget balances, and platforms such as Trello have been adopted to track subscription renewal cycles and manage other projects. This guide discusses the benefits of using these powerful cloud-based and little to no additional cost technology tools through the lens of a particular area in librarianship such as documentation, data and project management, communication, data storage, and data visualization. While the real-world examples provided throughout focus on technical services staff operations, specifically acquisitions and electronic collection management, each tool's features and use cases are transferable among all areas of librarianship. This guide provides insights into how collaborative, dynamic, and accessible these cloud-based solutions are for a technologically shifting workplace as well as considers the challenges to adopting cloud-based solutions such as administrative buy-in, aversion to change, and steeper learning curves as well. Readers will gain practical experiential examples that have been instrumental in creating efficiencies in collection management workflows for technical services staff. The use cases illustrated exemplify enhancements that librarians can incorporate into their own collection management practices to further engage with their colleagues, their patrons, and their larger communities more effectively and efficiently.

cloud computing books 2022: IoT and Cloud Computing for Societal Good Jitendra Kumar Verma, Deepak Saxena, Vicente González-Prida, 2021-12-26 This book gathers the state-of-the-art for industrial application of scientific and practical research in the Cloud and IoT paradigms to benefit society. The book first aims to discuss and outline various aspects of tackling climate change. The authors then discuss how Cloud and IoT can help for digital health and learning from industrial aspects. The next part of book discusses technical improvements in the fields of security and privacy. The book also covers Smart Homes and IoT in agriculture. The book is targeted towards advancing undergraduate, graduate, and post graduate students, researchers, academicians, policymakers, various government officials, NGOs, and industry research professionals who are currently working in the field of science and technology either directly or indirectly to benefit common masses.

cloud computing books 2022: *Emerging Trends in IoT and Integration with Data Science, Cloud Computing, and Big Data Analytics* Taser, Pelin Yildirim, 2021-11-05 The internet of things (IoT) has emerged to address the need for connectivity and seamless integration with other devices as well as big data platforms for analytics. However, there are challenges that IoT-based applications face including design and implementation issues; connectivity problems; data gathering, storing, and analyzing in cloud-based environments; and IoT security and privacy issues. *Emerging Trends in IoT and Integration with Data Science, Cloud Computing, and Big Data Analytics* is a critical reference source that provides theoretical frameworks and research findings on IoT and big data integration. Highlighting topics that include wearable sensors, machine learning, machine intelligence, and mobile computing, this book serves professionals who want to improve their understanding of the strategic role of trust at different levels of the information and knowledge society. It is therefore of most value to data scientists, computer scientists, data analysts, IT specialists, academicians, professionals, researchers, and students working in the field of information and knowledge management in various disciplines that include but are not limited to information and communication sciences, administrative sciences and management, education, sociology, computer science, etc. Moreover, the book provides insights and supports executives concerned with the management of expertise, knowledge, information, and organizational development in different types of work communities and environments.

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Virtualization Technology5. Service Oriented Architecture6. Cloud Security and Privacy7. Cloud Computing Applications8. Cloud Computing Technologies, Platform and Services9. Adoption of Cloud Computing10. Model Paper 111. Model Paper 212. Model Paper 313. Model Paper 4 About the authorKamal Kant Hiran is working as Associate Professor & Head IT in the BlueCrest University College, Liberia, West Africa as well as Research Fellow, Aalborg University, Copenhagen, Denmark. He has rich experience of 14+ years as an academician and researcher in Asia, Africa and Europe. His research interests include Cloud Computing adoption theories and framework, Internet of Things (IoT) and Digital Image and Video Processing. He has several awards on his credit such as International travel grant for Germany from ITS Europe, Gold Medal Award in M. Tech (ICT), IEEE Ghana Section Award, IEEE Senior Member Recognition, IEEE Student branch award and Best Research paper award from the University of Gondar, Ethiopia. He has published research papers in peer-reviewed international journals and conferences. He is Reviewer and Editorial board member of various reputed International Journals in Elsevier, Springer, IEEE, Bentham Science, IGI Global, IJSET, IJTEE, IJSTR and IJERT. He is the active member in organizing many international seminars, workshops and conferences in India, Ghana, Liberia, Denmark, Jordan and Ethiopia.His website: <http://www.kamalahiran.in/>His LinkedIn profile:

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<https://www.linkedin.com/in/ruchi-doshi-96bb63b4/> Dr. Fagbola Temitayo is currently a Post-Doctoral Fellow (PDF) at Durban University of Technology, South Africa and an Assistant Professor in the Department of Computer Science, Federal University, Oye-Ekiti, Nigeria with over 10 years of proven teaching and research experience. He bagged a Ph.D., M.Sc and B.Tech degrees in Computer Science with strong research interests in cloud computing ecosystem, deep learning, computational intelligence, social media big-data analytics, information security, decision support system and video processing. Dr Fagbola is a member of the South African Institute of Computer Scientists and Information Technologists (SAICSIT), Asian Council of Science Editors (ACSE), Machine Intelligence Institute of Africa (MIIA), Computer Professionals (Registration Council) of Nigeria (CPN), the International Association of Engineers (IAENG) and DataHack4FI in Africa. He has over 50 refereed publications in referred international journals and conference proceedings to his credit and currently serves as a reviewer for over 15 reputable international journals. He is also a recipient of the ACM FAT's grant in November 2018.His LinkedIn profile:

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great economic expansion of the twentieth century can be traced to a similar confluence, one that was first visible in the 1920s: a new information infrastructure (telephony), new machines (cars and power plants), and new materials (plastics and pharmaceuticals). Single inventions don't drive great, long-cycle booms. It always takes convergent revolutions in technology's three core spheres—information, materials, and machines. Over history, that's only happened a few times. We have wrung much magic from the technologies that fueled the last long boom. But the great convergence now underway will ignite the 2020s. And this time, unlike any previous historical epoch, we have the Cloud amplifying everything. The next long boom starts now.

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