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Cloud Computing For Dummies Handbook of Cloud Computing Implementing and Developing Cloud Computing Applications Assured Cloud Computing Cloud Computing Guide to Cloud Computing Integration of Cloud Computing with Internet of Things Cloud Computing for Science and Engineering Cloud Computing Cloud Computing Cloud Computing The Cloud Computing Book What is Cloud Computing? All about cloud technology Cloud Computing Cloud Computing Cloud Computing and Digital Media Cloud Computing Bible Cloud Computing Applications of Cloud Computing Cloud Computing Cloud Computing Basics Cloud Computing with e-Science Applications Cloud Computing The Significant Concepts of Cloud Computing Cloud Computing and Big Data Cloud Computing and Software Services AI and Cloud Computing Cloud Computing Cloud Computing Resource Management and Efficiency in Cloud Computing Environments Advanced Research on Cloud Computing Design and Applications Handbook of Cloud Computing Cloud Computing Handbook of Cloud Computing Essentials of Cloud Computing Handbook of Cloud Computing Security for Cloud Computing Trustworthy Cloud Computing Pervasive Cloud Computing Technologies: Future Outlooks and Interdisciplinary Perspectives Managing and Processing Big Data in Cloud Computing

Cloud Computing For Dummies

2010-01-19

the easy way to understand and implement cloud computing technology written by a team of experts cloud computing can be difficult to understand at first but the cost saving possibilities are great and many companies are getting on board if you ve been put in charge of implementing cloud computing this straightforward plain english guide clears up the confusion and helps you get your plan in place you ll learn how cloud computing enables you to run a more green it infrastructure and access technology enabled services from the internet in the cloud without having to understand manage or invest in the technology infrastructure that supports them you ll also find out what you need to consider when implementing a plan how to handle security issues and more cloud computing is a way for businesses to take advantage of storage and virtual services through the internet saving money on infrastructure and support this book provides a clear definition of cloud computing from the utility computing standpoint and also addresses security concerns offers practical guidance on delivering and managing cloud computing services effectively and efficiently presents a proactive and pragmatic approach to implementing cloud computing in any organization helps it managers and staff understand the benefits and challenges of cloud computing how to select a service and what s involved in getting it up and running highly experienced author team consults and gives presentations on emerging technologies cloud computing for dummies gets straight to the point providing the practical information you need to know

Handbook of Cloud Computing

2010-09-11

cloud computing has become a significant technology trend experts believe cloud computing is currently reshaping information technology and the it marketplace the advantages of using cloud computing include cost savings speed to market access to greater computing resources high availability and scalability handbook of cloud computing includes contributions from world experts in the field of cloud computing from academia research laboratories and private industry this book presents the systems tools and services of the leading providers of cloud computing including google yahoo amazon ibm and microsoft the basic concepts of cloud computing and cloud computing applications are also introduced current and future technologies applied in cloud computing are also discussed case studies examples and exercises are provided throughout handbook of cloud computing is intended for advanced level students and researchers in computer science and electrical engineering as a reference book this handbook is also beneficial to computer and system infrastructure designers developers business managers entrepreneurs and investors within the cloud computing related industry

Implementing and Developing Cloud Computing Applications

2010-11-17

from small start ups to major corporations companies of all sizes have embraced cloud computing for the scalability reliability and cost benefits it can provide it has even been said that cloud computing may have a greater effect on our lives than the pc and dot com revolutions combined filled with comparative charts and decision trees impleme

Assured Cloud Computing

2018-10-02

explores key challenges and solutions to assured cloud computing today and provides a provocative look at the face of cloud computing tomorrow this book offers readers a comprehensive suite of solutions for resolving many of the key challenges to achieving high levels of assurance in cloud computing the distillation of critical research findings generated by the assured cloud computing center of excellence acc ucoe of the university of illinois urbana champaign it provides unique insights into the current and future shape of robust

dependable and secure cloud based computing and data cyberinfrastructures a survivable and distributed cloud computing based infrastructure can enable the configuration of any dynamic systems of systems that contain both trusted and partially trusted resources and services sourced from multiple organizations to assure mission critical computations and workflows that rely on such systems of systems it is necessary to ensure that a given configuration does not violate any security or reliability requirements furthermore it is necessary to model the trustworthiness of a workflow or computation fulfillment to a high level of assurance in presenting the substance of the work done by the acc ucoe this book provides a vision for assured cloud computing illustrating how individual research contributions relate to each other and to the big picture of assured cloud computing in addition the book explores dominant themes in cloud based systems including design correctness support for big data and analytics monitoring and detection network considerations and performance synthesizes heavily cited earlier work on topics such as dare trust mechanisms and elastic graphs as well as newer research findings on topics including r storm and ramp transactions addresses assured cloud computing concerns such as game theory stream processing storage algorithms workflow scheduling access control formal analysis of safety and streaming bringing together the freshest thinking and applications in one of today s most important topics assured cloud computing is a must read for researchers and professionals in the fields of computer science and engineering especially those working within industrial military and governmental contexts it is also a valuable reference for advanced students of computer science

Cloud Computing

2022-02-15

cloud computing theory and practice third edition provides students and it professionals with an in depth analysis of the cloud from the ground up after an introduction to network centric computing and network centric content the book reviews basic concepts of concurrency and parallel and distributed systems presents critical components of the cloud ecosystem as cloud service providers cloud access cloud data storage and cloud hardware and software covers cloud applications and cloud security and presents research topics in cloud computing specific topics covered include resource virtualization resource management and scheduling and advanced topics like the impact of scale on efficiency cloud scheduling subject to deadlines alternative cloud architectures and vehicular clouds an included glossary covers terms grouped in several categories from general to services virtualization desirable attributes and security presents updated content throughout chapters on concurrency cloud hardware and software challenges posed by big data mobile applications and advanced topics includes an expanded appendix that presents several cloud computing projects provides more than 400 references in the text including recent research results in several areas related to cloud computing

Guide to Cloud Computing

2012-11-28

this book describes the landscape of cloud computing from first principles leading the reader step by step through the process of building and configuring a cloud environment the book not only considers the technologies for designing and creating cloud computing platforms but also the business models and frameworks in real world implementation of cloud platforms emphasis is placed on learning by doing and readers are encouraged to experiment with a range of different tools and approaches topics and features includes review questions hands on exercises study activities and discussion topics throughout the text demonstrates the approaches used to build cloud computing infrastructures reviews the social economic and political aspects of the on going growth in cloud computing use discusses legal and security concerns in cloud computing examines techniques for the appraisal of financial investment into cloud computing identifies areas for further research within this rapidly moving field

Integration of Cloud Computing with Internet of Things

2021-04-13

the book aims to integrate the aspects of iot cloud computing and data analytics from diversified perspectives the book also plans to discuss the recent research trends and advanced topics in the field which will be of interest to academicians and researchers working in this area thus the book intends to help its readers to understand and explore the spectrum of

applications of iot cloud computing and data analytics here it is also worth mentioning that the book is believed to draw attention on the applications of said technology in various disciplines in order to obtain enhanced understanding of the readers also this book focuses on the researches and challenges in the domain of iot cloud computing and data analytics from perspectives of various stakeholders

Cloud Computing for Science and Engineering

2017-09-29

a guide to cloud computing for students scientists and engineers with advice and many hands on examples the emergence of powerful always on cloud utilities has transformed how consumers interact with information technology enabling video streaming intelligent personal assistants and the sharing of content businesses too have benefited from the cloud outsourcing much of their information technology to cloud services science however has not fully exploited the advantages of the cloud could scientific discovery be accelerated if mundane chores were automated and outsourced to the cloud leading computer scientists ian foster and dennis gannon argue that it can and in this book offer a guide to cloud computing for students scientists and engineers with advice and many hands on examples the book surveys the technology that underpins the cloud new approaches to technical problems enabled by the cloud and the concepts required to integrate cloud services into scientific work it covers managing data in the cloud and how to program these services computing in the cloud from deploying single virtual machines or containers to supporting basic interactive science experiments to gathering clusters of machines to do data analytics using the cloud as a platform for automating analysis procedures machine learning and analyzing streaming data building your own cloud with open source software and cloud security the book is accompanied by a website cloud4scieng org that provides a variety of supplementary material including exercises lecture slides and other resources helpful to readers and instructors

Cloud Computing

2010-04-07

modern computing is no longer about devices but is all about providing services a natural progression that both consumers and enterprises are eager to embrace as it can deliver those services efficiently and with quality at compelling price levels cloud computing is with us to stay ubiquitously and quite definitively cloud computing is

Cloud Computing

2010-07-16

cloud computing continues to emerge as a subject of substantial industrial and academic interest although the meaning and scope of cloud computing continues to be debated the current notion of clouds blurs the distinctions between grid services web services and data centers among other areas clouds also bring considerations of lowering the cost for relatively bursty applications to the fore cloud computing principles systems and applications is an essential reference guide that provides thorough and timely examination of the services interfaces and types of applications that can be executed on cloud based systems the book identifies and highlights state of the art techniques and methods for designing cloud systems presents mechanisms and schemes for linking clouds to economic activities and offers balanced coverage of all related technologies that collectively contribute towards the realization of cloud computing with an emphasis on the conceptual and systemic links between cloud computing and other distributed computing approaches this text also addresses the practical importance of efficiency scalability robustness and security as the four cornerstones of quality of service topics and features explores the relationship of cloud computing to other distributed computing paradigms namely peer to peer grids high performance computing and web services presents the principles techniques protocols and algorithms that can be adapted from other distributed computing paradigms to the development of successful clouds includes a foreword by professor mark baker of the university of reading uk examines current cloud practical applications and highlights early deployment experiences elaborates the economic schemes needed for clouds to become viable business models this book will serve as a comprehensive reference for researchers and students engaged in cloud computing professional system architects technical managers and it consultants will also find this unique text a practical guide to the application and delivery of commercial cloud services prof nick antonopoulos is head of the school of computing university of derby uk dr lee gillam is

a lecturer in the department of computing at the university of surrey uk

Cloud Computing

2017-03-30

this overview of cloud computing in a self teaching format contains state of the art chapters with tips and insights about cloud computing its architecture applications information on security and privacy and numerous case studies it includes questions for discussion and cloud computing lab experiments to help in mastering its complex services and technologies recent research shows that cloud computing will be worth billions of dollars in new investments organizations are flocking to the cloud services to benefit from the elasticity self services resource abundance ubiquity responsiveness and cost efficiencies that it offers many government and private universities have already migrated to the cloud the next wave in computing technology expected to usher in a new era will be based on cloud computing features explores the basic advancements in the field of cloud computing offers a practical self teaching approach with numerous case studies and lab experiments on installation evaluation security and more includes material on esxi ms azure eucalyptus and more

The Cloud Computing Book

2021-06-30

the latest textbook from best selling author provides a comprehensive introduction to cloud computing

What is Cloud Computing? All about cloud technology

2019-12-17

cloud computing is a technology that uses the internet and central remote servers to maintain data and applications cloud computing allows consumers and businesses to use applications without installation and access their personal files at any computer with internet access this technology allows for much more efficient computing by centralizing storage memory processing and bandwidth cloud computing consists of shared computing resources that are virtualized and accessed as a service through an api the cloud enables users in an organization to run applications by deploying them to the cloud a virtual data center

Cloud Computing

2017-03-27

cloud computing implementation management and security provides an understanding of what cloud computing really means explores how disruptive it may become in the future and examines its advantages and disadvantages it gives business executives the knowledge necessary to make informed educated decisions regarding cloud initiatives the authors first discuss the evolution of computing from a historical perspective focusing primarily on advances that led to the development of cloud computing they then survey some of the critical components that are necessary to make the cloud computing paradigm feasible they also present various standards based on the use and implementation issues surrounding cloud computing and describe the infrastructure management that is maintained by cloud computing service providers after addressing significant legal and philosophical issues the book concludes with a hard look at successful cloud computing vendors helping to overcome the lack of understanding currently preventing even faster adoption of cloud computing this book arms readers with guidance essential to make smart strategic decisions on cloud initiatives

Cloud Computing

2014-10-20

this book reviews the challenging issues that present barriers to greater implementation of the cloud computing paradigm together with the latest research into developing potential solutions topics and features presents a focus on the most important issues and limitations of cloud computing covering cloud security and architecture qos and slas discusses a methodology for cloud security management and proposes a framework for secure data storage and identity management in the cloud introduces a simulation tool for energy aware cloud environments and an efficient congestion control system for data center networks examines the issues of energy aware vm consolidation in the iaas provision and software defined networking for cloud related applications reviews current trends and suggests future developments in virtualization cloud security qos data warehouses cloud federation approaches and dbaas provision predicts how the next generation of utility computing infrastructures will be designed

Cloud Computing and Digital Media

2014-03-07

cloud computing and digital media fundamentals techniques and applications presents the fundamentals of cloud and media infrastructure novel technologies that integrate digital media with cloud computing and real world applications that exemplify the potential of cloud computing for next generation digital media it brings together technologie

Cloud Computing Bible

2010-12-10

the complete reference guide to the hot technology of cloud computing its potential for lowering it costs makes cloud computing a major force for both it vendors and users it is expected to gain momentum rapidly with the launch of office apps later this year because cloud computing involves various technologies protocols platforms and infrastructure elements this comprehensive reference is just what you need if you ll be using or implementing cloud computing cloud computing offers significant cost savings by eliminating upfront expenses for hardware and software its growing popularity is expected to skyrocket when microsoft introduces office apps this comprehensive guide helps define what cloud computing is and thoroughly explores the technologies protocols platforms and infrastructure that make it so desirable covers mobile cloud computing a significant area due to ever increasing cell phone and smartphone use focuses on the platforms and technologies essential to cloud computing anyone involved with planning implementing using or maintaining a cloud computing project will rely on the information in cloud computing bible

Cloud Computing

2021-03-08

comprehensive and timely cloud computing concepts and technologies offers a thorough and detailed description of cloud computing concepts architectures and technologies along with guidance on the best ways to understand and implement them it covers the multi core architectures distributed and parallel computing models virtualization cloud developments workload and service level agreements sla in cloud workload management further resource management issues in cloud with regard to resource provisioning resource allocation resource mapping and resource adaptation ethical non ethical and security issues in cloud are followed by discussion of open challenges and future directions this book gives students a comprehensive overview of the latest technologies and guidance on cloud computing and is ideal for those studying the subject in specific modules or advanced courses it is designed in twelve chapters followed by laboratory setups and experiments each chapter has multiple choice questions with answers as well as review questions and critical thinking questions the chapters are practically focused meaning that the information will also be relevant and useful for professionals wanting an overview of the topic

Applications of Cloud Computing

2020-11-12

in the era of the internet of things and with the explosive worldwide growth of electronic data volume and associated need of processing analysis and storage of such a humongous amount of data it has now become mandatory to exploit the power of massively parallel architecture for fast computation cloud computing provides a cheap source of such a computing framework for a large volume of data for real time applications it is therefore not surprising to see that cloud computing has become a buzzword in the computing fraternity over the last decade applications of cloud computing approaches and practices lays a good foundation for the core concepts and principles of cloud computing applications walking the reader through the fundamental ideas with expert ease the book progresses on the topics in a step by step manner it reinforces theory with a full fledged pedagogy designed to enhance students understanding and offer them a practical insight into the applications of it it is a valuable source of knowledge for researchers engineers practitioners and graduate and doctoral students working in the field of cloud computing it will also be useful for faculty members of graduate schools and universities

Cloud Computing

2017-07-04

follows structured approach explaining cloud techniques models and platforms

Cloud Computing Basics

2018-11-29

this book is designed for use as a primary textbook for a course in cloud computing or as a resource for professionals in industry seeking to explore cloud services the book highlights the recent developments in distributed computing and details the architecture virtualization concepts and security concerns of cloud computing it also provides a detailed understanding of the benefits of cloud computing that can encourage enterprises to switch to the cloud features provides a basic understanding of the computing paradigm of cloud computing gives a brief introduction to cloud computing its architecture and the hadoop distributed file system deals with cloud management concepts like scalable fault tolerance resiliency provisioning asset management cloud governance high availability disaster recovery and multi tenancy includes case studies on ms azure google amazon services aneka etc

Cloud Computing with e-Science Applications

2017-12-19

the amount of data in everyday life has been exploding this data increase has been especially significant in scientific fields where substantial amounts of data must be captured communicated aggregated stored and analyzed cloud computing with e science applications explains how cloud computing can improve data management in data heavy fields such as bioinformatics earth science and computer science the book begins with an overview of cloud models supplied by the national institute of standards and technology nist and then discusses the challenges imposed by big data on scientific data infrastructures including security and trust issues covers vulnerabilities such as data theft or loss privacy concerns infected applications threats in virtualization and cross virtual machine attack describes the implementation of workflows in clouds proposing an architecture composed of two layers platform and application details infrastructure as a service iaas platform as a service paas and software as a service saas solutions based on public private and hybrid cloud computing models demonstrates how cloud computing aids in resource control vertical and horizontal scalability interoperability and adaptive scheduling featuring significant contributions from research centers universities and industries worldwide cloud computing with e science applications presents innovative cloud migration methodologies applicable to a variety of fields where large data sets are produced the book provides the scientific community with an essential reference for moving applications to the cloud

Cloud Computing

2019-09-20

unleash the power of cloud computing using azure aws and apache hadoopkey features provides a sound understanding of the cloud computing concepts architecture and its applications explores the practical benefits of cloud computing services and deployment models in details cloud computing architecture cloud computing life cycle cclc load balancing approach mobile cloud computing mcc google app engine gae virtualization and service oriented architecture soa cloud computing applications google apps dropbox cloud and apple icloud and its uses in various sectors education healthcare politics business and agriculture cloud computing platforms microsoft azure amazon services aws open nebulla eucalyptus open stack nimbus and the apache hadoop architecture adoption of cloud computing technology and strategies for migration to the cloud cloud computing adoption case studies sub saharan africa and india chapter wise questions with summary and examination model question papers description with the advent of internet there is a complete paradigm shift in the manner we comprehend computing need to enable ubiquity convenient and on demand access to resources in highly scalable and resilient environments that can be remotely accessed gave birth to the concept of cloud computing the acceptance is so rapid that the notion influences sophisticated innovations in academia industry and research world wide and hereby change the landscape of information technology as we thought of through this book the authors tried to incorporate core principles and basic notion of cloud computing in a step by step manner and tried to emphasize on key concepts for clear and thorough insight into the subject this book begins with the fundamentals of cloud computing its service and deployment models architecture as well as applications and platforms it presents some key enterprise strategies and models for the adoption of and migration to cloud privacy and security issues and challenges also form a major part of our discussion in the book as well as case studies of cloud computing adoption in sub saharan africa and india the book concludes with a discussion of several advanced topics such as amazon services aws open nebulla microsoft azure apache hadoop and google app engine gae what will you learn learn about the importance of cloud computing in current digital era understand the core concepts and principles of cloud computing with practical benefits learn about the cloud deployment models and services discover how cloud computing architecture works learn about the load balancing approach and mobile cloud computing mcc learn about the virtualization and service oriented architecture soa concepts learn about the various cloud computing applications platforms and security concepts understand the adoption cloud computing technology and strategies for migration to the cloud case studies for cloud computing adoption sub saharan africa and india who this book is forthis book is intended for students of b e b tech b sc m sc m e and m tech as a text book the content is designed keeping in mind the bench marked curriculum of various universities both national and international the book covers not only the technical details of how cloud works but also exhibits the strategy technical design and in depth knowledge required to migrate existing applications to the cloud therefore it makes it relevant for the beginners who wants to learn cloud computing right from the foundation aspiring cloud computing researchers instructors academicians and professionals if they are familiar with cloud can use this book to learn various open source cloud computing tools applications technologies they will also get a flavor of various international certification exams available table of contents1 foundation of cloud computing 2 cloud services and deployment models3 cloud computing architecture4 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 kamalhiran in his linkedin profile linkedin com in kamal kant hiran 4553b643ruchi doshi is having more than 10 years of academic research and software development experience in asia and africa she is working as registrar in the bluecrest university college liberia west africa an also worked with bluecrest university college ghana amity university india trimax it infrastructure services as software engineer she is interested in the field of cloud computing computer vision artificial intelligence and latest technology used in the higher education she has published research papers in peer reviewed international journals and conferences she is reviewer advisor ambassador editorial board member of various reputed international journals and conferences such as mir labs usa ieee w4s ijcs and ijert she is the active member in organizing many international events in india ghana and liberia her linkedin profile 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 linkedin com in temitayo fagbola 5941a2169mehul mahrishi is currently working as an associate professor in the faculty of computer science engineering at the swami keshvanand institute of technology management and gramothan jaipur india he is a life member of international association of engineers and has published several research articles in national international journals conferences including global journals iccctam dubai icmlc singapore iacc and chapters in books he is also an active technical reviewer of journal of parallel and distributed computing sci scopus elsevier his research activities are currently twofold while the first research activity is set to explore the developmental enhancements video processing and analysis the second major research theme is focused on the emerging capabilities of cloud computing mr mahrishi is rewarded at number of occasions in various domains including recognition as an active reviewer by journal of parallel and distributed computing jpdc elsevier sci scopus indexed ieee continuing education certification for e cloud computing enable technologies and recognition for outstanding performance in campus connect program by infosys india his linkedin profile linkedin com in mehuk mahrishi 30979026

The Significant Concepts of Cloud Computing

2015-11-13

everybody has a supposition on what is a cloud computing cloud computing is a modern area emerged by distributed computing that offers many powerful benefits to different organizations it has an ability to rent a server or a thousand of servers via information technology it services whole the world the capabilities of cloud computing are obtained by running a geophysical modeling application on most powerful systems organizations can improve their efficiency to quickly and reliably respond to the needs of their customers it is performed by making a contract for various cloud services such as applications software data storages and processing capabilities there are some risks in cloud based servers such as maintaining the security of systems asserting the privacy of information and insuring the wise expenditures of it resources cloud technology causes the dedicated services to be always on occurring on the running systems to be upgraded and accordance with demand to be scaled considerably cloud computing involves a range of underlying technologies and configuration options instead of being as a single system organizations should consider the strengths and weaknesses of the cloud technology service models and deployment methods through evaluating services to meet their requirements a cloud system can extremely store and secure large amounts of data that is accessible only by authorized users and applications it is supported and sponsored by a cloud service provider which installs a powerful platform on the cloud systems the platform involves some of the required abilities such as the operating system apache a mysql database perl python and php with a capability for automatically scaling in response to changing the different workloads cloud computing can utilize some applications such as sales automation email and forum management on the internet internet can protect data while providing a consumer s service as well it is able to utilize the cloud storage for holding an application personal data and business a cloud system with the aid of the internet can use a small number of services in order to integrate maps photos and gps information this book discusses about the main concepts of cloud computing it is an appropriate tutorial for ordinary and professional people to acquire some required information about cloud technology chapter 1 introduces the overall and fundamental characteristic of cloud systems such as services grid computing and hardware virtualization in chapter 2 the architectures of cloud computing including the deployment models and the service models defined for cloud based servers are described carefully chapter 3 explains various applications of cloud computing in various applications such as file storage cloud database and email in chapter 4 some popular consumer applications designed by cloud based systems such as evernote icloud and spotify are represented completely chapter 5 discusses about the different usages of cloud servers such cloud monitoring healthcare and banking in chapter 6 the security issues of cloud computing such as privacy reliability and compliance are presented carefully chapter 7 points out the famous simulation tools designed for cloud based issues such as cloudsim xen hypervisor and uec finally chapter 8 introduces some well liked companies established for cloud based usages such as cloudlock cloudmunch and cloudphysics i hope that this book can help to ordinary people and professional researchers to design and implement various applications with cloud technology undoubtedly this book like any humanistic product is not devoid of any problem hence the next version of this book can be published more appropriate than current version according to valuable suggestions of dear readers i wish that this book can assist to computer science to design complex systems and to solve some of the exiting problems

Cloud Computing and Big Data

2013-10-22

cloud computing offers many advantages to researchers and engineers who need access to high performance computing facilities for solving particular compute intensive and or large scale problems but whose overall high performance computing hpc needs do not justify the acquisition and operation of dedicated hpc facilities there are however a number of fundamental problems which must be addressed such as the limitations imposed by accessibility security and communication speed before these advantages can be exploited to the full this book presents 14 contributions selected from the international research workshop on advanced high performance computing systems held in cetraro italy in june 2012 the papers are arranged in three chapters chapter 1 includes five papers on cloud infrastructures while chapter 2 discusses cloud applications the third chapter in the book deals with big data which is nothing new large scientific organizations have been collecting large amounts of data for decades but what is new is that the focus has now broadened to include sectors such as business analytics financial analyses internet service providers oil and gas medicine automotive and a host of others this book will be of interest to all those whose work involves them with aspects of cloud computing and big data applications

Cloud Computing and Software Services

2010-07-19

whether you re already in the cloud or determining whether or not it makes sense for your organization cloud computing and software services theory and techniques provides the technical understanding needed to develop and maintain state of the art cloud computing and software services from basic concepts and recent research findings to fut

AI and Cloud Computing

2021-01-13

ai and cloud computing volume 120 in the advances in computers series highlights new advances in the field with this updated volume presenting interesting chapters on topics including a deep forest based approach for detecting fraudulent online transaction design of cyber physical social systems with forensic awareness based on deep learning review on privacy preserving data comparison protocols in cloud computing fingerprint liveness detection using an improved cnn with the spatial pyramid pooling structure protecting personal sensitive data security in the cloud with blockchain and more provides the authority and expertise of leading contributors from an international board of authors presents the latest release in the advances in computers series includes the latest information on ai and cloud computing

Cloud Computing

2016-01-19

cloud computing business trends and technologies provides a broad introduction to cloud computing technologies and their applications to it and telecommunications businesses i e the network function virtualization nfv to this end the book is expected to serve as a textbook in a graduate course on cloud computing the book examines the business cases and then concentrates on the technologies necessary for supporting them in the process the book addresses the principles of as well as the known problems with the underlying technologies such as virtualization data communications network and operations management security and identity management it introduces through open source case studies based on openstack an extensive illustration of lifecycle management the book also looks at the existing and emerging standards demonstrating their respective relation to each topic overall this is an authoritative textbook on this emerging and still developing discipline which guides the reader through basic concepts to current practices to state of the art applications considers technical standards bodies involved in cloud computing standardization is written by innovation experts in operating systems and data communications each with over 20 years experience in business research and teaching

Cloud Computing

2017-06-02

this practically focused reference presents a comprehensive overview of the state of the art in cloud computing and examines the potential for future cloud and cloud related technologies to address specific industrial and research challenges this new edition explores both established and emergent principles techniques protocols and algorithms involved with the design development and management of cloud based systems the text reviews a range of applications and methods for linking clouds undertaking data management and scientific data analysis and addressing requirements both of data analysis and of management of large scale and complex systems this new edition also extends into the emergent next generation of mobile telecommunications relating network function virtualization and mobile edge cloud computing as supports smart grids and smart cities as with the first edition emphasis is placed on the four quality of service cornerstones of efficiency scalability robustness and security

Resource Management and Efficiency in Cloud Computing Environments

2016-11-08

today s advancements in technology have brought about a new era of speed and simplicity for consumers and businesses due to these new benefits the possibilities of universal connectivity storage and computation are made tangible thus leading the way to new internet of things solutions resource management and efficiency in cloud computing environments is an authoritative reference source for the latest scholarly research on the emerging trends of cloud computing and reveals the benefits cloud paths provide to consumers featuring coverage across a range of relevant perspectives and topics such as big data cloud security and utility computing this publication is an essential source for researchers students and professionals seeking current research on the organization and productivity of cloud computing environments

Advanced Research on Cloud Computing Design and Applications

2015-09-23

modern society requires a specialized persistent approach to it service delivery cloud computing offers the most logical answer through a highly dynamic and virtualized resource made available by an increasing number of service providers advanced research on cloud computing design and applications shares the latest high quality research results on cloud computing and explores the broad applicability and scope of these trends on an international scale venturing into the hot button issue of it services evolution and what we need to do to be prepared for future developments in cloud computing this book is an essential reference source for researchers and practitioners in the field of cloud computing as well as a guide for students academics or anyone seeking to learn more about advancement in it services this publication features chapters covering a broad range of relevant topics including cloud computing for e government cloud computing in the public sector security in the cloud hybrid clouds and outsourced data it service personalization and supply chain in the cloud

Handbook of Cloud Computing

2019-09-18

great possibilities and high future prospects to become ten times folds in the near future description the book Òhandbook of cloud computingÓ 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 key features comprehensively gives clear picture of current state of the art aspect of cloud computing by elaboratingÊ 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 what will you learn cloud computing virtualisation software as a service platform as a service infrastructure as a service data in cloud and its securityÊ cloud computing Ð 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 studentsÑmsc cs it mca m phil m tech m s researcherÕsÑph 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 contents 1 Ê Ê introduction to cloud computing 2 Ê Ê virtualisation 3 Ê Ê software as a service 4 Ê Ê platform as a service 5 Ê Ê infrastructure as a service 6 Ê Ê data in cloud 7 Ê Ê cloud securityÊ 8 Ê Ê cloud computing Ð simulation 9 Ê Ê specific cloud service models 10 Ê resource allocation in cloud computing 11 Ê mobile cloud computing

Cloud Computing

2016-04-19

as more and more data is generated at a faster than ever rate processing large volumes of data is becoming a challenge for data analysis software addressing performance issues cloud computing data intensive computing and scheduling explores the evolution of classical techniques and describes completely new methods and innovative algorithms the

Handbook of Cloud Computing

2010-09-29

cloud computing has become a significant technology trend experts believe cloud computing is currently reshaping information technology and the it marketplace the advantages of using cloud computing include cost savings speed to market access to greater computing resources high availability and scalability handbook of cloud computing includes contributions from world experts in the field of cloud computing from academia research laboratories and private industry this book presents the systems tools and services of the leading providers of cloud computing including google yahoo amazon ibm and microsoft the basic concepts of cloud computing and cloud computing applications are also introduced current and future technologies applied in cloud computing are also discussed case studies examples and exercises are provided throughout handbook of cloud computing is intended for advanced level students and researchers in computer science and electrical engineering as a reference book this handbook is also beneficial to computer and system infrastructure designers developers business managers entrepreneurs and investors within the cloud computing related industry

Essentials of Cloud Computing

2014-12-05

cloud computing accessing computing resources over the internet is rapidly changing the landscape of information technology its primary benefits compared to on premise computing models are reduced costs and increased agility and scalability hence cloud computing is receiving considerable interest among several stakeholders businesses the it ind

Handbook of Cloud Computing

2010

this comprehensive resource presents a highly informative overview of cloud computing security issues this book focuses on relevant approaches aimed at monitoring and protecting computation and data hosted on heterogeneous computing resources the most critical security aspects are thoroughly discussed highlighting the importance of reliable secure

computation over remote heterogeneous cloud nodes this book shows that present cloud computing is inherently insecure therefore advanced execution models have to be developed to prevent unauthorized users from accessing or affecting others data and computation the cloud approach enables on demand scalable services that allow performing large computations without the costs and maintenance management issues of costly server farms thus enabling a novel kind of outsourced computing essential reading for software and computer engineers as well as data architects and it professionals to better understand the complexity and heterogeneity of modern cloud based scenarios

Security for Cloud Computing

2015-10-01

introduces the topic of cloud computing with an emphasis on the trustworthiness of cloud computing systems and services this book describes the scientific basis of cloud computing explaining the ideas principles and architectures of cloud computing as well the different types of clouds and the services they provide the text reviews several cloud computing platforms including microsoft azure amazon oracle google hp ibm salesforce and kaavo the author addresses the problem of trustworthiness in cloud computing and provides methods to improve the security and privacy of cloud applications the end of chapter exercises and supplementary material on the book s companion website will allow readers to grasp the introductory and advanced level concepts of cloud computing examines cloud computing platforms such as microsoft azure amazon oracle google hp ibm salesforce and kaavo analyzes the use of aspect oriented programming aop for refactoring cloud services and improving the security and privacy of cloud applications contains practical examples of cloud computing test questions and end of chapter exercises includes presentations examples of cloud projects and other teaching resources at the author s website vladimirsafonov org cloud trustworthy cloud computing is written for advanced undergraduate and graduate students in computer science data science and computer engineering as well as software engineers system architects system managers and software developers new to cloud computing

Trustworthy Cloud Computing

2016-01-29

technology trends may come and go but cloud computing technologies have been gaining consideration in the commercial world due to its ability to provide on demand access to resources control the software environment and supplement existing systems pervasive cloud computing technologies future outlooks and interdisciplinary perspectives explores the latest innovations with cloud computing and the impact of these new models and technologies this book will present case studies and research on the future of cloud computing technologies and its ability to increase connectivity of various entities of the world it is an essential resource for technology practitioners engineers managers and academics aiming to gain the knowledge of these novel and pervasive technologies

Pervasive Cloud Computing Technologies: Future Outlooks and Interdisciplinary Perspectives

2013-10-31

big data has presented a number of opportunities across industries with these opportunities come a number of challenges associated with handling analyzing and storing large data sets one solution to this challenge is cloud computing which supports a massive storage and computation facility in order to accommodate big data processing managing and processing big data in cloud computing explores the challenges of supporting big data processing and cloud based platforms as a proposed solution emphasizing a number of crucial topics such as data analytics wireless networks mobile clouds and machine learning this publication meets the research needs of data analysts it professionals researchers graduate students and educators in the areas of data science computer programming and it development

Managing and Processing Big Data in Cloud Computing

2016-01-07