Big Data And Cloud Computing Issues And Problems

ANDREA ARNAV

Handbook of Research on Cloud Infrastructures for Big Data Analytics John Wiley & Sons
This book introduces the latest research findings in cloud, edge, fog, and mist computing and their applications in various fields using geospatial data. It solves a number of problems of cloud computing and big data, such as scheduling, security issues using different techniques, which researchers from industry and academia have been attempting to solve in virtual environments. Some of these problems are of an intractable nature and so efficient technologies like fog, edge and mist computing play an important role in addressing these issues. By exploring emerging advances in cloud computing and big data analytics and their engineering applications, the book enables researchers to understand the mechanisms needed to implement cloud, edge, fog, and mist computing in their own endeavours, and motivates them to examine their own research findings and developments.
Strategic Engineering for Cloud Computing and Big Data Analytics Springer
Clouds are being positioned as the next-generation consolidated, centralized, yet federated IT infrastructure for hosting all kinds of IT platforms and for deploying, maintaining, and managing a wider variety of personal, as well as professional applications and services. Handbook of Research on Cloud Infrastructures for Big Data Analytics focuses exclusively on the topic of cloud-sponsored big data analytics for creating flexible and futuristic organizations. This book helps researchers and practitioners, as well as business entrepreneurs, to make informed decisions and consider appropriate action to simplify and streamline the arduous journey towards smarter enterprises.
Big-Data Analytics and Cloud Computing Morgan Kaufmann
Find the right big data solution for your business ororganization Big data management is one of the major challenges facingbusiness, industry, and not-for-profit organizations. Data setssuch as customer transactions for a mega-retailer, weather patternsmonitored by meteorologists, or social network activity can quicklyoutpace the capacity of traditional data management tools. If youneed to develop or manage big data solutions, you'll appreciate howthese four experts define, explain, and guide you through this newand often confusing concept. You'll learn what it is, why itmatters, and how to choose and implement solutions that work. Effectively managing big data is an issue of growing importanceto businesses, not-for-profit organizations, government, and ITprofessionals Authors are experts in information management, big data, and avariety of solutions Explains big data in detail and discusses how to select andimplement a solution, security concerns to consider, data storageand presentation issues, analytics, and much more Provides essential information in a no-nonsense,easy-to-understand style that is empowering Big Data For Dummies cuts through the confusion and helpsyou take charge of big data solutions for your organization.
Cloud Computing and Big Data
Big data is currently one of the most critical emerging technologies. Organizations around the world are looking to exploit the explosive growth of data to unlock previously hidden insights in the hope of creating new revenue streams, gaining operational efficiencies, and obtaining greater understanding of customer needs. It is important to think of big data and analytics together. Big data is the term used to describe the recent explosion of different types of data from disparate sources. Analytics is about examining data to derive interesting and relevant trends and patterns, which can be used to inform decisions, optimize processes, and even drive new business models. With today's deluge of data comes the problems of processing that data, obtaining the correct skills to manage and analyze that data, and establishing rules to govern the data's use and distribution. The big data technology stack is ever growing and sometimes confusing, even more so when we add the complexities of setting up big data environments with large up-front investments. Cloud computing seems to be a perfect vehicle for hosting big data workloads. However, working on big data in the cloud brings its own challenge of reconciling two contradictory design principles. Cloud computing is based on the concepts of consolidation and resource pooling, but big data systems (such as Hadoop) are built on the shared nothing principle, where each node is independent and self-sufficient. A solution architecture that can allow these mutually exclusive principles to coexist is required to truly exploit the elasticity and ease-of-use of cloud computing for big data environments. This IBM® RedpaperTM publication is aimed at chief architects, line-of-business executives, and CIOs to provide an understanding of the cloud-related challenges they face and give prescriptive guidance for how to realize the benefits of big data solutions quickly and cost-effectively.
Cloud Computing for Geospatial Big Data Analytics Springer
Software Architecture for Big Data and the Cloud is designed to be a single resource that brings together research on how software architectures can solve the challenges imposed by building big data software systems. The challenges of big data on the software architecture can relate to scale, security, integrity, performance, concurrency, parallelism, and dependability, amongst others. Big data handling requires rethinking architectural solutions to meet functional and non-functional requirements related to volume, variety and velocity. The book's editors have varied and complementary backgrounds in requirements and architecture, specifically in software architectures for cloud and big data, as well as expertise in software engineering for cloud and big data. This book brings together work across different disciplines in software engineering, including work expanded from conference tracks and workshops led by the editors. Discusses systematic and disciplined approaches to building software architectures for cloud and big data with state-of-the-art methods and techniques Presents case studies involving enterprise, business, and government service deployment of big data applications Shares guidance on theory, frameworks, methodologies, and architecture for cloud and big data
Big-Data Analytics for Cloud, IoT and Cognitive Computing Springer
This book reports on the latest advances in mobile technologies for collecting, storing and processing mobile big data in connection with wireless communications. It presents novel approaches and applications in which mobile big data is being applied from an engineering standpoint and addresses future theoretical and practical challenges related to the big data field from a mobility perspective. Further, it provides an overview of new methodologies designed to take mobile big data to the Cloud, enable the processing of real-time streaming events on-the-move and enhance the integration of resource availability through the ‘Anywhere, Anything, Anytime’ paradigm. By providing both academia and industry researchers and professionals with a timely snapshot of emerging mobile big data-centric systems and highlighting related pitfalls, as well as potential solutions, the book fills an important gap in the literature and fosters the further development in the area of mobile technologies for exploiting mobile big data.
Third International Conference, BDCA 2018, Kenitra, Morocco, April 4–5, 2018, Revised Selected Papers CRC Press
HPC, Big Data, AI Convergence Towards Exascale provides an updated vision on the most advanced computing, storage, and interconnection technologies, that are at basis of convergence among the HPC, Cloud, Big Data, and artificial intelligence (AI) domains. Through the presentation of the solutions devised within recently founded H2020 European projects, this book provides an insight on challenges faced by integrating such technologies and in achieving performance and energy efficiency targets towards the exascale level. Emphasis is given to innovative ways of provisioning and managing resources, as well as monitoring their usage. Industrial and scientific use cases give to the reader practical examples of the needs for a cross-domain convergence. All the chapters in this book pave the road to new generation of technologies, support their development and, in addition, verify them on real-world problems. The readers will find this book useful because it provides an overview of currently available technologies that fit with the concept of unified Cloud-HPC-Big Data-AI applications and presents examples of their actual use in scientific and industrial

applications.
Cloud Computing and Big Data: Technologies, Applications and Security Springer
Vehicular traffic congestion and accidents remain universal issues in today's world. Due to the continued growth in the use of vehicles, optimizing traffic management operations is an immense challenge. To reduce the number of traffic accidents, improve the performance of transportation systems, enhance road safety, and protect the environment, vehicular ad-hoc networks have been introduced. Current developments in wireless communication, computing paradigms, big data, and cloud computing enable the enhancement of these networks, equipped with wireless communication capabilities and high-performance processing tools. Cloud-Based Big Data Analytics in Vehicular Ad-Hoc Networks is a pivotal reference source that provides vital research on cloud and data analytic applications in intelligent transportation systems. While highlighting topics such as location routing, accident detection, and data warehousing, this publication addresses future challenges in vehicular ad-hoc networks and presents viable solutions. This book is ideally designed for researchers, computer scientists, engineers, automobile industry professionals, IT practitioners, academicians, and students seeking current research on cloud computing models in vehicular networks.
Big Data Analytics for Internet of Things Computing and Networks
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.
Cloud Computing and Big Data John Wiley & Sons
This book presents the outcomes of the 3rd IEEE/ACIS International Conference on Big Data, Cloud Computing, Data Science & Engineering (BCD 2018), which was held on July 10–12, 2018 in Kanazawa. The aim of the conference was to bring together researchers and scientists, businesspeople and entrepreneurs, teachers, engineers, computer users, and students to discuss the various fields of computer science, to share their experiences, and to exchange new ideas and information in a meaningful way. All aspects (theory, applications and tools) of computer and information science, the practical challenges encountered along the way, and the solutions adopted to solve them are all explored here. The conference organizers selected the best papers from among those accepted for presentation. The papers were chosen on the basis of review scores submitted by members of the program committee and subsequently underwent further rigorous review. Following this second round of review, 13 of the conference's most promising papers were selected for this Springer (SCI) book. We eagerly await the important contributions that we know these authors will make to the field of computer and information science.
Concepts and Applications IGI Global
This book provides a framework for evaluating big data and cloud computing based on how they evolve to fit users' needs in developing countries in key areas, such as agriculture and education. The authors discuss how this framework can be utilized by businesses, governments, and consumers to accelerate economic growth and overcome information and communication barriers. By examining the ways in which cloud computing can drive social, economic, and environmental transformation, readers gain a nuanced understanding of the opportunities and challenges these technologies offer. The authors also provide an authoritative and up-to-date account of big data's diffusion into a wide range of developing economies, such as Brazil and China, illustrating key concepts through in-depth case studies. Special attention is paid to economic development in the context of the new Sustainable Development Goals formulated by the United Nations, introducing readers to the most modern standard of economic evaluation. Students of information management, entrepreneurship, and development, as well as policy makers, researchers, and practitioners, will find Big Data and Cloud Computing for Development an interesting read and a useful reference source.
Data Intensive Computing Applications for Big Data IGI Global
Big Data Systems encompass massive challenges related to data diversity, storage mechanisms, and requirements of massive computational power. Further, capabilities of big data systems also vary with respect to type of problems. For instance, distributed memory systems are not recommended for iterative algorithms. Similarly, variations in big data systems also exist related to consistency and fault tolerance. The purpose of this book is to provide a detailed explanation of big data systems. The book covers various topics including Networking, Security, Privacy, Storage, Computation, Cloud Computing, NoSQL and NewSQL systems, High Performance Computing, and Deep Learning. An illustrative and practical approach has been adopted in which theoretical topics have been aided by well-explained programming and illustrative examples. Key Features: Introduces concepts and evolution of Big Data technology. Illustrates examples for thorough understanding. Contains programming examples for hands on development. Explains a variety of topics including NoSQL Systems, NewSQL systems, Security, Privacy, Networking, Cloud, High Performance Computing, and Deep Learning. Exemplifies widely used big data technologies such as Hadoop and Spark. Includes discussion on case studies and open issues. Provides end of chapter questions for enhanced learning.
Theory, Algorithms and Applications Springer
This book is a compendium of the proceedings of the International Conference on Big Data and Cloud Computing. It includes recent advances in the areas of big data analytics, cloud computing, internet of nano things, cloud security, data analytics in the cloud, smart cities and grids, etc. This volume primarily focuses on the application of the knowledge that promotes ideas for solving the problems of the society through cutting-edge technologies. The articles featured in this proceeding provide novel ideas that contribute to the growth of world class research and development. The contents of this volume will be of interest to researchers and professionals alike.
Security and Privacy for Big Data, Cloud Computing and Applications IGI Global
This book constitutes the thoroughly refereed proceedings of the Third International Conference on Big Data, Cloud and Applications, BDCA 2018, held in Kenitra, Morocco, in April 2018.The 45 revised full papers presented in this book were carefully selected from 99 submissions with a thorough double-blind review process. They focus on the following topics: big data, cloud computing, machine learning, deep learning, data analysis, neural networks, information system and social media, image processing and applications, and natural language processing.
A Roadmap from Models to Technologies IGI Global
The definitive guide to successfully integrating social, mobile, Big-Data analytics, cloud and IoT principles and technologies The main goal of this book is to spur the development of effective big-data computing operations on smart clouds that are fully supported by IoT sensing, machine learning and analytics systems. To that end, the authors draw upon their original research and proven track record in the field to describe a practical approach integrating big-data theories, cloud design principles, Internet of Things (IoT) sensing, machine learning, data analytics and Hadoop and Spark programming. Part 1 focuses on data science, the roles of clouds and IoT devices and frameworks for big-data computing. Big data analytics and cognitive machine learning, as well as cloud architecture, IoT and cognitive systems are explored, and mobile cloud-IoT-interaction frameworks are illustrated with concrete system design examples. Part 2 is devoted to the principles of and algorithms for machine learning, data analytics and deep learning in big data applications. Part 3 concentrates on cloud programming software libraries from MapReduce to Hadoop, Spark and TensorFlow and describes business, educational, healthcare and social media applications for those tools. The first book describing a practical approach to integrating social, mobile, analytics, cloud and IoT (SMACT) principles and technologies Covers theory and computing techniques and technologies, making it suitable for use in both computer science and electrical engineering programs Offers an extremely well-informed vision of future intelligent and cognitive computing environments integrating SMACT technologies Fully illustrated throughout with examples, figures and approximately 150 problems to support and reinforce learning Features a companion website with an instructor manual and PowerPoint slides www.wiley.com/go/hwangIOT Big-Data Analytics for Cloud, IoT and Cognitive Computing satisfies the demand among university faculty and students for cutting-edge information on emerging intelligent and cognitive computing systems and technologies. Professionals working in data science, cloud computing and IoT applications will also find this book to be an extremely useful working resource.
Challenges and Opportunities for the Convergence of IoT, Big Data, and Cloud Computing IOS Press
Large Scale and Big Data: Processing and Management provides readers with a central source of reference on the data management techniques currently available for large-scale data processing. Presenting chapters written by leading researchers, academics, and practitioners, it addresses the fundamental challenges associated with Big Data processing tools and techniques across a range of computing environments. The book begins by discussing the basic concepts and tools of large-scale Big Data processing and cloud computing. It also provides an overview of different programming models and cloud-based deployment models. The book's second section examines the usage of advanced Big Data processing techniques in different domains, including semantic web, graph processing, and stream processing. The third section discusses advanced topics of Big Data processing such as consistency management, privacy, and security. Supplying a comprehensive summary from both the research and applied perspectives, the book covers recent research discoveries and applications, making it an ideal reference for a wide range of audiences, including researchers and academics working on databases, data mining, and web scale data processing. After reading this book, you will gain a fundamental understanding of how to use Big Data-processing tools and techniques effectively across application domains. Coverage includes cloud data management architectures, big data analytics visualization, data management, analytics for vast amounts of unstructured data, clustering, classification, link analysis of big data, scalable data mining, and machine learning techniques.
Big Data, Cloud and Applications IGI Global
Systems Simulation and Modelling for Cloud Computing and Big Data Applications provides readers with the most current approaches to solving problems through the use of models and simulations, presenting SSM based approaches to performance testing and benchmarking that offer significant advantages. For example, multiple big data and cloud application developers and researchers can perform tests in a controllable and repeatable manner. Inspired by the need to analyze the performance of different big data processing and cloud frameworks, researchers have introduced several benchmarks, including BigDataBench, BigBench, HiBench, PigMix, CloudSuite and GridMix, which are all covered in this book. Despite the substantial progress, the research community still needs a holistic, comprehensive big data SSM to use in almost every scientific and engineering discipline involving multidisciplinary research. SSM develops frameworks that are applicable across disciplines to develop benchmarking tools that are useful in solutions development. Examines the methodology and requirements of benchmarking big data and cloud computing tools, advances in big data frameworks and benchmarks for large-scale data analytics, and frameworks for benchmarking and predictive analytics in big data deployment Discusses applications using big data benchmarks, such as BigDataBench, BigBench, HiBench, MapReduce, HPCC, ECL, HOBBIT, GridMix and PigMix, and applications using big data frameworks, such as Hadoop, Spark, Samza, Flink and SQL frameworks Covers development of big data benchmarks to evaluate workloads in state-of-the-practice heterogeneous hardware platforms, advances in modeling and simulation tools for performance evaluation, security problems and scalable cloud computing environments
Big Data Systems John Wiley & Sons
The book 'Data Intensive Computing Applications for Big Data' discusses the technical concepts of big data, data intensive computing through machine learning, soft computing and parallel computing paradigms. It brings together researchers to report their latest results or progress in the development of the above mentioned areas. Since there are few books on this specific subject, the editors aim to provide a common platform for researchers working in this area to exhibit their novel findings. The book is intended as a reference work for advanced undergraduates and graduate students, as well as multidisciplinary, interdisciplinary and transdisciplinary research workers and scientists on the subjects of big data and cloud/parallel and distributed computing, and explains didactically many of the core concepts of these approaches for practical applications. It is organized into 24 chapters providing a comprehensive overview of big data analysis using parallel computing and addresses the complete data science workflow in the cloud, as well as dealing with privacy issues and the challenges faced in a data-intensive cloud computing environment. The book explores both fundamental and high-level concepts, and will serve as a manual for those in the industry, while also helping beginners to understand the basic and advanced aspects of big data and cloud computing.
Lessons from Key Industries and Economies in the Global South IGI Global
This book is a compendium of the proceedings of the International Conference on Big-Data and Cloud Computing. It includes recent advances in the areas of big data analytics, cloud computing, the Internet of nano things, cloud security, data analytics in the cloud, smart cities and grids, etc. Primarily focusing on the application of knowledge that promotes ideas for solving the problems of the society through cutting-edge technologies, it provides novel ideas that further world-class research and development. This concise compilation of articles approved by a panel of expert reviewers is an invaluable resource for researchers in the area of advanced engineering sciences.
Handbook of Research on Cloud Computing and Big Data Applications in IoT John Wiley & Sons
This book examines various topics and approaches related to the security and privacy in big data and cloud computing, where authors share their expertise in their respective chapters on a broad

range of security and privacy challenges and state of the art solutions.

Related with Big Data And Cloud Computing Issues And Problems:
© Big Data And Cloud Computing Issues And Problems Ace Group Fitness Certification Exam
© Big Data And Cloud Computing Issues And Problems Accountable Hipaa Training Quiz Answers
© Big Data And Cloud Computing Issues And Problems Acls Precourse Self Assessment Answers 2022 Rhythm