Mongodb The Definitive Guide G C It

Manage your data with a system designed to support modern application development. Updated for MongoDB 4.2, the third edition of this authoritative and accessible guide shows you the advantages of using document-oriented databases. You'll learn how this secure, high-performance system enables flexible data models, high availability, and horizontal scalability. Authors Shannon Bradshaw, Eoin Brazil, and Kristina Chodorow provide guidance for database developers, advanced configuration for system administrators, and use cases for a variety of projects. NoSQL newcomers and experienced MongoDB users will find updates on querying, indexing, aggregation, transactions, replica sets, ops management, sharding and data administration, durability, monitoring, and security. In six parts, this book shows you how to: Work with MongoDB, perform write operations, find documents, and create complex queries Index collections, aggregate data, and use transactions for your application Configure a local replica set and learn how replication interacts with your application Set up cluster components and choose a shard key for a variety of applications Explore aspects of application administration and configure authentication and authorization Use stats when monitoring, back up and restore deployments, and use system settings when deploying MongoDB

The term Intelligent Environments (IEs) refers to physical spaces in which IT and other pervasive computing technologies are combined and used to achieve specific goals for the user, the environment, or both. The ultimate objective of IEs is to enrich user experience, improve management of the environment in question and increase user awareness. This book presents the proceedings of the following workshops, which formed part of the 12th International Conference on Intelligent Environments (IE16), held in London, UK, in September 2016: the 5th International Workshop on Smart Offices and Other Workplaces (SOOW'16); the 5th International Workshop on the Reliability of Intelligent Environments (WoRIE'16); the 1st International Workshop on Legal Issues in Intelligent Environments (LIIE'2016); the 2nd International Symposium on Future Intelligent Educational Environments and Learning (SOFIEE'16); the 2nd International Workshop on Future Internet and Smart Networks (FI&SN'2016); the International Workshop on Intelligent Environments Supporting Healthcare and Well-being (WISHWell'2016); the International Workshop on Computation Sustainability, Technologies and Applications (CoSTA'2016); the Creative Science 2016 (CS'16) and Cloud-of-Things 2016 (CoT'16); the Workshop on Wireless Body Area Networks for Personal Monitoring in Intelligent Environments (WBAN-PMIE); and the Physical Computing Workshop. The workshops focused on the development of advanced intelligent environments, as well as newly emerging and rapidly evolving topics, emphasizing the multi-disciplinary and transversal aspects of IEs, as well as cutting-edge topics. The book will be of interest to all those whose work involves them in the use of intelligent environments.

Web services, cloud computing, location based services, NoSQLdatabases, and Semantic Web offer new ways of accessing, analyzing, and elaborating geo-spatial information in both real-world and virtual spaces. This book explores the how-to of the most promising recurrent technologies and trends in GIS, such as Semantic GIS, Web GIS, Mobile GIS, NoSQL Geographic Databases,

Cloud GIS, Spatial Data Warehousing-OLAP, and Open GIS. The text discusses and emphasizes the methodological aspects of such technologies and their applications in GIS.

MongoDB gives flexibility in compare to RDBMS. It has features like dynamic schemas, storage for large volume data, scaling database architecture, real-time data reporting, data sharding, and so on. It enables to develop application faster. To address all these features in a concise manner, this e-book is created. This e-book has explained features of MongoDB, that is important from the point of Big data analytics. It makes clear the confusion over MySQL and NoSQL working pattern. It has accommodated all the topics on MongoDB with examples. It guides you right through setting up MongoDB environment to security requirements. The book is too small, but all important aspect of MongoDB is covered. The examples and code are explained in a manner that beginners can easily absorb the content. The book has also illustrated various shell commands to access MongoDB. Not only that, but the user will also explore about JSON document and creating queries in MongoDB. The book can be used for further reference for application build on MongoDB Java or MongoDB Python. Minimum price range and maximum deliverable is the main plus point of this e-book. Table content Chapter 1: Introduction Chapter 2: Download and Install MongoDB on Windows Download & Install MongoDB on Windows Install Driver- Javascript, Python and Ruby Install Robomongo- MongoDB Management Tool MongoDB Configuration, Import and Export Configuring MongoDB server with configuration file Chapter 3: Create Database & Insert Data Creating a database Creating a collection Chapter 4: Add MongoDB Array using insert() Chapter 5: ObjectId() Chapter 6: Query Document using find() Chapter 7: Cursor Chapter 8: Query Modifications using limit(), sort() Chapter 9: Count() & remove() function Chapter 10: Update() Document Chapter 11: Indexing, Monitoring & Backup Chapter 12: How to Create User in Mongodb & assign Roles Chapter 13: Authentication with Kerberos Chapter 14: Replica Set Replica Set: Adding the First Member using rs.initiate() Replica Set: Adding a Secondary using rs.add() Replica Set: Reconfiguring or Removing using rs.remove() Troubleshooting Replica Sets Chapter 15: Sharded Cluster Chapter 16: Indexing - createIndex() Understanding Impact of Indexes Create Indexes Finding Indexes Dropping Indexes Chapter 17: Regular Expression (Regex) Using $regex operator for Pattern matching Pattern Matching with $options Pattern matching without the regex operator Fetching last 'n' documents from a collection

This book covers the latest advances in Big Data technologies and provides the readers with a comprehensive review of the state-of-the-art in Big Data processing, analysis, analytics, and other related topics. It presents new models, algorithms, software solutions and methodologies, covering the full data cycle, from data gathering to their visualization and interaction, and includes a set of case studies and best practices. New research issues, challenges and opportunities shaping the future agenda in the field of Big Data are also identified and presented throughout the book, which is intended for researchers, scholars, advanced students, software developers and practitioners working at the forefront in their field.

The book features research papers presented at the International Conference on Emerging Technologies in Data Mining and Information Security (IEMIS 2018) held at the University of Engineering & Management, Kolkata, India, on February 23–25, 2018. It comprises high-quality research by academics and industrial experts in the field of computing and communication, including full-

length papers, research-in-progress papers, case studies related to all the areas of data mining, machine learning, IoT and information security.

Human language technology is the study of the methods by which computer programs or electronic devices can analyze, produce, modify or respond to human texts and speech. It consists of natural language processing and computational linguistics on the one hand, and speech technology on the other. This book presents the proceedings of the 9th International Conference, Human Language Technologies – The Baltic Perspective (Baltic HLT 2020), organised in Kaunas, Lithuania on 22 and 23 September 2020. This biennial conference offers researchers a platform to share knowledge on recent advances in human language processing for the Baltic languages, as well as promoting interdisciplinary and international cooperation in human language-technology research within and beyond the Baltic States. In addition to the traditional topics of natural language processing and language technologies, this year's conference featured a special session on resource and tool development for teaching and learning the less resourced Baltic languages. This year, 42 submissions were received, each of which was evaluated by two reviewers, resulting in a total of 34 papers being accepted for presentation and publication. The book is divided into four sections: speech and text analysis (9 papers); machine translation and natural understanding (6 papers); tools and resources (14 papers); and language learning resources (5 papers). Providing a fascinating overview of current research in the field from a primarily Baltic perspective, the book will be of interest to all those whose work involves human language technology.

This book reports on state-of-art research and applications in the field of databases and information systems. It includes both fourteen selected short contributions, presented at the East-European Conference on Advances in Databases and Information Systems (ADBIS 2013, September 1-4, Genova, Italy), and twenty-six papers from ADBIS 2013 satellite events. The short contributions from the main conference are collected in the first part of the book, which covers a wide range of topics, like data management, similarity searches, spatio-temporal and social network data, data mining, data warehousing, and data management on novel architectures, such as graphics processing units, parallel database management systems, cloud and MapReduce environments. In contrast, the contributions from the satellite events are organized in five different parts, according to their respective ADBIS satellite event: BiDaTA 2013 - Special Session on Big Data: New Trends and Applications); GID 2013 – The Second International Workshop on GPUs in Databases; OAIS 2013 – The Second International Workshop on Ontologies Meet Advanced Information Systems; SoBI 2013 – The First International Workshop on Social Business Intelligence: Integrating Social Content in Decision Making; and last but not least, the Doctoral Consortium, a forum for Ph.D. students. The book, which addresses academics and professionals alike, provides the readers with a comprehensive and timely overview of new trends in database and information systems research, and promotes new ideas and collaborations among the different research communities of the eastern European countries and the rest of the world.

This book constitutes the refereed proceedings of the 8h International Conference on Model and Data Engineering, MEDI 2018, held in Marrakesh, Morocco, in October 2018. The 23 full papers and 4 short papers presented together with 2 invited talks were carefully reviewed and selected from 86 submissions. The papers covered the recent and relevant topics in the areas of databases; ontology and model-driven engineering; data fusion, classsification and learning; communication and information technologies; safety and security; algorithms and text

processing; and specification, verification and validation.
This introductory text shows the advantages of using document-oriented databases and demonstrates how MongoDB is a reliable, high-performance system that allows for horizontal scalability. This updated second edition provides guidance for database developers, advanced configuration for system administrators, and an overview of the concepts and use cases for other people on a project.
Mastering Cloud Computing is designed for undergraduate students learning to develop cloud computing applications. Tomorrow's applications won’t live on a single computer but will be deployed from and reside on a virtual server, accessible anywhere, any time. Tomorrow's application developers need to understand the requirements of building apps for these virtual systems, including concurrent programming, high-performance computing, and data-intensive systems. The book introduces the principles of distributed and parallel computing underlying cloud architectures and specifically focuses on virtualization, thread programming, task programming, and map-reduce programming. There are examples demonstrating all of these and more, with exercises and labs throughout. Explains how to make design choices and tradeoffs to consider when building applications to run in a virtual cloud environment Real-world case studies include scientific, business, and energy-efficiency considerations
Node.js, MongoDB and Angular Web Development The definitive guide to using the MEAN stack to build web applications Node.js is a leading server-side programming environment, MongoDB is the most popular NoSQL database, and Angular is the leading framework for MVC-based front-end development. Together, they provide an easy-to-implement, fully integrated web development stack that allows web programmers to create high-performance sites and applications built completely in JavaScript, from server to client. Updated for Angular 2, Angular 4, and subsequent versions, this new edition of Node.js, MongoDB and Angular Web Development shows you how to integrate these three technologies into complete working solutions. It begins with concise, crystal-clear tutorials on each technology and then quickly moves on to building common web applications. You’ll learn how to use Node.js and MongoDB to build more scalable, high-performance sites, how to leverage Angular’s innovative MVC approach to structure more effective pages and applications, and how to use all three together to deliver outstanding next-generation Web solutions. Implement a highly scalable and dynamic web server using Node.js and Express Implement a MongoDB data store for your web applications Access and interact with MongoDB from Node.js JavaScript code Learn the basics of TypeScript Define custom Angular directives that extend the HTML language Build server-side web services in JavaScript Implement client-side services that can interact with the Node.js web server Build dynamic browser views that provide rich user interaction Add authenticated user accounts and nested comment components to your web applications and pages Contents at a Glance Part I: Getting Started 1 Introducing the Node.js-to-Angular Stack 2 JavaScript Primer Part II: Learning Node.js 3 Getting Started with Node.js 4 Using Events, Listeners, Timers, and Callbacks in Node.js 5 Handling Data I/O in Node.js 6 Accessing the File System from Node.js 7 Implementing HTTP Services in Node.js 8 Implementing Socket Services in Node.js 9 Scaling Applications Using Multiple Processors in Node.js 10 Using Additional Node.js Modules Part III: Learning MongoDB 11 Understanding NoSQL and MongoDB 12 Getting Started with MongoDB 13 Getting Started with MongoDB and Node.js 14 Manipulating MongoDB Documents from Node.js 15 Accessing MongoDB from Node.js 16 Using Mongoose for Structured Schema and Validation 17 Advanced MongoDB Concepts Part IV: Using Express to Make Life Easier 18 Implementing Express in Node.js 19 Implementing Express Middleware Part V: Learning Angular 20 Jumping into TypeScript 21 Getting Started with Angular 22 Angular Components 23 Expressions 24 Data Binding 25 Built-in Directives Part VI: Advanced Angular 26 Custom Directives 27 Events and Change Detection 28 Implementing Angular Services in Web Applications 29 Creating Your Own Custom Angular

Services 30 Having Fun with Angular

The Definitive Guide to MongoDB, Second Edition, is updated for the latest version and includes all of the latest MongoDB features, including the aggregation framework introduced in version 2.2 and hashed indexes in version 2.4. MongoDB is the most popular of the "Big Data" NoSQL database technologies, and it's still growing. David Hows from 10gen, along with experienced MongoDB authors Peter Membrey and Eelco Plugge, provide their expertise and experience in teaching you everything you need to know to become a MongoDB pro.

With Early Release ebooks, you get books in their earliest form—the author's raw and unedited content as he or she writes—so you can take advantage of these technologies long before the official release of these titles. You'll also receive updates when significant changes are made, new chapters are available, and the final ebook bundle is released. Manage your data in a database system designed to support modern application development. The updated edition of this authoritative and accessible guide shows you the many advantages of using document-oriented databases, including how this secure, high-performance system enables flexible data models, high availability, and horizontal scalability. Written by current and former members of the MongoDB team, the third edition is updated for MongoDB 3.6. You'll find substantial updates on querying, indexing, aggregation, replica sets, ops manager, sharding administration, data administration, durability, monitoring, and security. Authors Shannon Bradshaw (MongoDB) and Kristina Chodorow (Google) provide guidance for database developers, advanced configuration for system administrators, and use cases for a variety of projects. Ideal for NoSQL newcomers and experienced MongoDB users alike, this book also includes many real-world schema design examples.

From cloud computing to data analytics, society stores vast supplies of information through wireless networks and mobile computing. As organizations are becoming increasingly more wireless, ensuring the security and seamless function of electronic gadgets while creating a strong network is imperative. Advanced Methodologies and Technologies in Network Architecture, Mobile Computing, and Data Analytics highlights the challenges associated with creating a strong network architecture in a perpetually online society. Readers will learn various methods in building a seamless mobile computing option and the most effective means of analyzing big data. This book is an important resource for information technology professionals, software developers, data analysts, graduate-level students, researchers, computer engineers, and IT specialists seeking modern information on emerging methods in data mining, information technology, and wireless networks.

This volume constitutes the refereed post-conference proceedings of the Fourth International Conference on Machine Learning and Intelligent Communications, MLICOM 2019, held in Nanjing, China, in August 2019. The 65 revised full papers were carefully selected from 114 submissions. The papers are organized thematically in machine learning, intelligent positioning and navigation, intelligent multimedia processing and security, wireless mobile network and security, cognitive radio and intelligent networking, IoT, intelligent satellite communications and networking, green communication and intelligent networking, ad-hoc and sensor networks, resource allocation in wireless and cloud networks, signal processing in wireless and optical communications, and intelligent cooperative communications and networking.

Manage your data in a database system designed to support modern application development. The updated edition of this authoritative and accessible guide shows you the many advantages of using document-oriented databases, including how this

secure, high-performance system enables flexible data models, high availability, and horizontal scalability. Written by current and former members of the MongoDB team, the third edition is updated for MongoDB 4.0. You'll find substantial updates on querying, indexing, aggregation, replica sets, ops manager, sharding administration, data administration, durability, monitoring, and security. Authors Shannon Bradshaw (MongoDB) and Kristina Chodorow (Google) provide guidance for database developers, advanced configuration for system administrators, and use cases for a variety of projects. Ideal for NoSQL newcomers and experienced MongoDB users alike, this book also includes many real-world schema design examples.

This book features a collection of high-quality, peer-reviewed papers presented at the Fourth International Conference on Intelligent Computing and Communication (ICICC 2020) organized by the Department of Computer Science and Engineering and the Department of Computer Science and Technology, Dayananda Sagar University, Bengaluru, India, on 18–20 September 2020. The book is organized in two volumes and discusses advanced and multi-disciplinary research regarding the design of smart computing and informatics. It focuses on innovation paradigms in system knowledge, intelligence and sustainability that can be applied to provide practical solutions to a number of problems in society, the environment and industry. Further, the book also addresses the deployment of emerging computational and knowledge transfer approaches, optimizing solutions in various disciplines of science, technology and health care.

This book gathers a selection of peer-reviewed papers presented at the Tiangong-2 Data Utilization Conference, which was held in Beijing, China, in December 2018. As the first space laboratory in China, Tiangong-2 carries 3 new types of remote sensing payloads – the Wide-band Imaging Spectrometer (WIS), Three-dimensional Imaging Microwave Altimeter (TIMA), and Multi-band Ultraviolet Edge Imaging Spectrometer (MUEIS) – for observing the Earth. The spectrum of the WIS covers 18 bands, from visible to thermal infrared, with a swath of 300km. The TIMA is the first-ever system to use interferometric imaging radar altimeter (InIRA) technology to measure sea surface height and land topography at near-nadir angles with a wide swath. In turn, the MUEIS is the world’s first large-field atmospheric detector capable of quasi-synchronously detecting the characteristics of ultraviolet limb radiation in the middle atmosphere. The Earth observation data obtained by Tiangong-2 has attracted many research groups and been applied in such diverse areas as land resources, water resources, climate change, environmental monitoring, agriculture, forestry, ecology, oceanography, meteorology and so on. The main subjects considered in this proceedings volume include: payload design, data processing, data service and application. It also provides a comprehensive introduction to the research results gleaned by engineers, researchers and scientists throughout the lifecycle of the Tiangong-2 Earth observation data, which will improve the payload development and enhance remote sensing data applications.

Today's malware mutates randomly to avoid detection, but reactively adaptive malware is more intelligent, learning and adapting to new computer defenses on the fly. Using the same algorithms that antivirus software uses to detect viruses, reactively adaptive malware deploys those algorithms to outwit antivirus defenses and to go undetected. This book provides details of the tools, the types of malware the tools will detect, implementation of the tools in a cloud computing framework and the applications for insider

threat detection.

The Definitive Guide to MongoDB, Third Edition, is updated for MongoDB 3 and includes all of the latest MongoDB features, including the aggregation framework introduced in version 2.2 and hashed indexes in version 2.4. The Third Edition also now includes Python. MongoDB is the most popular of the "Big Data" NoSQL database technologies, and it's still growing. David Hows from 10gen, along with experienced MongoDB authors Peter Membrey and Eelco Plugge, provide their expertise and experience in teaching you everything you need to know to become a MongoDB pro.

MongoDB: The Definitive GuidePowerful and Scalable Data Storage"O'Reilly Media, Inc."

The Definitive Guide to MongoDB, Third Edition, is updated for MongoDB 3 and includes all of the latest MongoDB features, including the aggregation framework introduced in version 2.2 and hashed indexes in version 2.4. The Third Edition also now includes Node.js along with Python. MongoDB is the most popular of the "Big Data" NoSQL database technologies, and it's still growing. David Hows from 10gen, along with experienced MongoDB authors Peter Membrey and Eelco Plugge, provide their expertise and experience in teaching you everything you need to know to become a MongoDB pro.

The Definitive Guide to MongoDB, Second Edition, is updated for the latest version and includes all of the latest MongoDB features, including the aggregation framework introduced in version 2.2 and hashed indexes in version 2.4. MongoDB is the most popular of the "Big Data" NoSQL database technologies, and it's still growing. David Hows from 10gen, along with experienced MongoDB authors Peter Membrey and Eelco Plugge, provide their expertise and experience in teaching you everything you need to know to become a MongoDB pro. What you'll learn Set up MongoDB on all major server platforms, including Windows, Linux, OS X, and cloud platforms like Rackspace, Azure, and Amazon EC2 Work with GridFS and the new aggregation framework Work with your data using non-SQL commands Write applications using either PHP or Python Optimize MongoDB Master MongoDB administration, including replication, replication tagging, and tag-aware sharding Who this book is for Database admins and developers who need to get up to speed on MongoDB and its Big Data, NoSQL approach to dealing with data management. Table of ContentsPart I: MongoDB Basics Ch. 1: Introduction to MongoDB Ch. 2: Installing MongoDB Ch. 3: The Data Model Ch. 4: Working with Data Ch. 5: GridFS Part II: Developing with MongoDB Ch. 6: PHP and MongoDB Ch. 7: Python and MongoDB Ch. 8: Advanced Queries Part III: Advanced MongoDB with Big Data Ch. 9: Database Administration Ch. 10: Optimization Ch. 11: Replication Ch. 12: Sharding

MongoDB, a cross-platform NoSQL database, is the fastest-growing new database in the world. MongoDB provides a rich document-oriented structure with dynamic queries that you'll recognize from RDBMS offerings such as MySQL. In

other words, this is a book about a NoSQL database that does not require the SQL crowd to re-learn how the database world works! MongoDB has reached 1.0 and boasts 50,000+ users. The community is strong and vibrant and MongoDB is improving at a fast rate. With scalable and fast databases becoming critical for today's applications, this book shows you how to install, administer and program MongoDB without pretending SQL never existed.

This book constitutes the refereed proceedings of the First International Conference on Big Data Analytics, BDA 2012, held in New Delhi, India, in December 2012. The 5 regular papers and 5 short papers presented were carefully reviewed and selected from 42 submissions. The volume also contains two tutorial papers in the section perspectives on big data analytics. The regular contributions are organized in topical sections on: data analytics applications; knowledge discovery through information extraction; and data models in analytics.

This two volume set LNCS 9827 and LNCS 9828 constitutes the refereed proceedings of the 27th International Conference on Database and Expert Systems Applications, DEXA 2016, held in Porto, Portugal, September 2016. The 39 revised full papers presented together with 29 short papers were carefully reviewed and selected from 137 submissions. The papers discuss a range of topics including: Temporal, Spatial, and High Dimensional Databases; Data Mining; Authenticity, Privacy, Security, and Trust; Data Clustering; Distributed and Big Data Processing; Decision Support Systems, and Learning; Data Streams; Data Integration, and Interoperability; Semantic Web, and Data Semantics; Social Networks, and Network Analysis; Linked Data; Data Analysis; NoSQL, NewSQL; Multimedia Data; Personal Information Management; Semantic Web and Ontologies; Database and Information System Architectures; Query Answering and Optimization; Information Retrieval, and Keyword Search; Data Modelling, and Uncertainty.

This book includes high-quality papers presented at the International Conference on Data Science and Management (ICDSM 2019), organised by the Gandhi Institute for Education and Technology, Bhubaneswar, from 22 to 23 February 2019. It features research in which data science is used to facilitate the decision-making process in various application areas, and also covers a wide range of learning methods and their applications in a number of learning problems. The empirical studies, theoretical analyses and comparisons to psychological phenomena described contribute to the development of products to meet market demands.

How does MongoDB help you manage a huMONGOus amount of data collected through your web application? With this authoritative introduction, you'll learn the many advantages of using document-oriented databases, and discover why MongoDB is a reliable, high-performance system that allows for almost infinite horizontal scalability. Written by engineers from 10gen, the company that develops and supports this open source database, MongoDB: The Definitive Guide provides guidance for database developers, advanced configuration for system administrators, and an overview of the

concepts and use cases for other people on your project. Learn how easy it is to handle data as self-contained JSON-style documents, rather than as records in a relational database. Explore ways that document-oriented storage will work for your project Learn how MongoDB’s schema-free data model handles documents, collections, and multiple databases Execute basic write operations, and create complex queries to find data with any criteria Use indexes, aggregation tools, and other advanced query techniques Learn about monitoring, security and authentication, backup and repair, and more Set up master-slave and automatic failover replication in MongoDB Use sharding to scale MongoDB horizontally, and learn how it impacts applications Get example applications written in Java, PHP, Python, and Ruby

This updated and expanded second edition of the MongoDB: The Definitive Guide provides a user-friendly introduction to the subject Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to ensure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for all those interested in the subject . We hope you find this book useful in shaping your future career & Business.

This book constitutes the thoroughly refereed post-conference proceedings of the First International Workshop on Algorithmic Aspects of Cloud Computing, ALGOCLOUD 2015, held in Patras, Greece, in September 2015 in conjunction with ALGO 2015. The 13 revised full papers presented together with 2 tutorial papers were carefully reviewed and selected from 37 initial submissions. They cover a wide range of topics in two main tracks: algorithmic aspects of large-scale data stores, and software tools and distributed architectures for cloud-based data management.

This book is divided into different research areas relevant in Bioinformatics such as biological networks, next generation sequencing, high performance computing, molecular modeling, structural bioinformatics, molecular modeling and intelligent data analysis. Each book section introduces the basic concepts and then explains its application to problems of great relevance, so both novice and expert readers can benefit from the information and research works presented here.