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Soggetti	Big data Pattern perception Information storage and retrieval Computer networks Algorithms Big Data Pattern Recognition Information Storage and Retrieval Computer Communication Networks Algorithm Analysis and Problem Complexity Big Data/Analytics
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Nota di contenuto	Big Data Environment for Smart Healthcare Applications over 5G Mobile Network -- Challenges and Opportunities of Using Big Data for Assessing Flood Risks -- A Neural Networks Design Methodology for Detecting Loss of Coolant Accidents in Nuclear Power Plants -- Evolutionary Deployment and Hill Climbing-Based Movements of Multi-UAV Networks in Disaster Scenarios -- Detection of Obstructive Sleep Apnea Using Deep Neural Network -- A Study of Data Classification and Selection Techniques to Diagnose Headache Patients -- Applications of Educational Data Mining and Learning Analytics Tools in Handling Big Data in Higher Education -- Handling Pregel’s Limits in Big Graphs Processing in the Presence of High Degree Vertices -- Nature Inspired

Radar Charts as an Innovative Big Data Analysis Tool -- Search of Similar Programs Using Code Metrics and Big Data Based Assessment of Software Reliability.

Sommario/riassunto

This timely text/reference reviews the state of the art of big data analytics, with a particular focus on practical applications. An authoritative selection of leading international researchers present detailed analyses of existing trends for storing and analyzing big data, together with valuable insights into the challenges inherent in current approaches and systems. This is further supported by real-world examples drawn from a broad range of application areas, including healthcare, education, and disaster management. The text also covers, typically from an application-oriented perspective, advances in data science in such areas as big data collection, searching, analysis, and knowledge discovery. Topics and features: Discusses a model for data traffic aggregation in 5G cellular networks, and a novel scheme for resource allocation in 5G networks with network slicing Explores methods that use big data in the assessment of flood risks, and apply neural networks techniques to monitor the safety of nuclear power plants Describes a system which leverages big data analytics and the Internet of Things in the application of drones to aid victims in disaster scenarios Proposes a novel deep learning-based health data analytics application for sleep apnea detection, and a novel pathway for diagnostic models of headache disorders Reviews techniques for educational data mining and learning analytics, and introduces a scalable MapReduce graph partitioning approach for high degree vertices Presents a multivariate and dynamic data representation model for the visualization of healthcare data, and big data analytics methods for software reliability assessment This practically-focused volume is an invaluable resource for all researchers, academics, data scientists and business professionals involved in the planning, designing, and implementation of big data analytics projects. Dr. Mohammed M. Alani is an Associate Professor in Computer Engineering and currently is the Provost at Al Khawarizmi International College, Abu Dhabi, UAE. Dr. Hissam Tawfik is a Professor of Computer Science in the School of Computing, Creative Technologies & Engineering at Leeds Beckett University, UK. Dr. Mohammed Saeed is a Professor in Computing and currently is the Vice President for Academic Affairs and Research at the University of Modern Sciences, Dubai, UAE. Dr. Obinna Anya is a Research Staff Member at IBM Research – Almaden, San Jose, CA, USA.