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Nota di contenuto	Section 1: Applications -- Chapter 1: AI Enabled resources scheduling in Cloud Paradigm -- Chapter 2: Role of AI for Data Security and Privacy in 5G Healthcare Informatics -- Chapter 3: GPU based AI for Modern E-Commerce Applications: Performance Evaluation, Analysis and Future Directions -- Chapter 4: Air Quality Index Prediction Using Various Machine Learning Algorithms -- Chapter 5: Leveraging Cloud Native Microservices Architecture for High Performance Real-Time Intra-day Trading: A Tutorial -- Chapter 6: HypEdge: Intelligent Sensing of Diabetes Mellitus in Healthcare 4.0 on the Cloud -- Section 2: Architecture, Systems and Services -- Chapter 7: Efficient Resource Allocation in Virtualized Cloud Platforms using Encapsulated Virtualization based Ant Colony Optimization (EVACO) -- Chapter 8: Authenticated, Secured, Intelligent and Assisted Medicine Dispensing Machine for Elderly Visual Impaired People -- Chapter 9: Prediction of Liver Disease Using Soft Computing and Data Science Approaches -- Chapter 10: Artificial Intelligence based Transfer Learning approach in

Identifying and Detecting Covid-19 Virus from CT-Scan Images -- Chapter 11: Blockchain-based Medical Report Management and Distribution System -- Chapter 12: Design of 3-D Pipe Routing for Internet of Things Networks Using Genetic Algorithm -- Section 3: Further Reading -- Chapter 13: Intelligent Fog-IoT Networks with 6G Endorsement: Foundations, Applications, Trends and Challenges -- Chapter 14: The role of machine learning in the advancement of 6G technology: opportunities and challenges -- Chapter 15: A Comprehensive Survey on Network Resource management in SDN Enabled Data Center Network -- Chapter 16: Artificial Intelligence Advancement For 6G Communication: A Visionary Approach -- Chapter 17: AI meets SDN: A survey of Artificial Intelligent techniques applied to Software-Defined Networks.

Sommario/riassunto

Over the past few years, the demand for data traffic has experienced explosive growth thanks to the increasing need to stay online. New applications of communications, such as wearable devices, autonomous systems, drones, and the Internet of Things (IoT), continue to emerge and generate even more data traffic with vastly different performance requirements. With the COVID-19 pandemic, the need to stay online has become even more crucial, as most of the fields, would they be industrial, educational, economic, or service-oriented, had to go online as best as they can. As the data traffic is expected to continuously strain the capacity of future communication networks, these networks need to evolve consistently in order to keep up with the growth of data traffic. Thus, more intelligent processing, operation, and optimization will be needed for tomorrow's communication networks. The Sixth Generation (6G) technology is latest approach for mobile systems or edge devices in terms of reduce traffic congestions, energy consumption blending with IoT devices applications. The 6G network works beyond the 5G (B5G), where we can use various platforms as an application e.g. fog computing enabled IoT networks, Intelligent techniques for SDN network, 6G enabled healthcare industry, energy aware location management. Still this technology must resolve few challenges like security, IoT enabled trust network. This book will focus on the use of AI/ML-based techniques to solve issues related to 6G enabled networks, their layers, as well as their applications. It will be a collection of original contributions regarding state-of-the-art AI/ML-based solutions for signal detection, channel modeling, resource optimization, routing protocol design, transport layer optimization, user/application behavior prediction 6G enabled software-defined networking, congestion control, communication network optimization, security, and anomaly detection. The proposed edited book emphasis on the 6G network blended with Fog-IoT networks to introduce its applications and future perspectives that helps the researcher to apply this technique in their domain and it may also helpful to resolve the challenges and future opportunities with 6G networks.
