

1. Record Nr.	UNINA9910554828203321
Titolo	Fog computing : theory and practice // edited by Assad Abbas, Samee U. Khan, Albert Y. Zomaya
Pubbl/distr/stampa	Hoboken, New Jersey : , : John Wiley & Sons, Inc., , 2020 [Piscataway, New Jersey] : , : IEEE Xplore, , [2020]
ISBN	1-119-55176-5 1-119-55171-4
Descrizione fisica	1 online resource (xxxii, 567 pages) : illustrations
Collana	Wiley series on parallel and distributed computing
Disciplina	004
Soggetti	Mobile computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Mobile Fog Computing: Architectures, Approaches and Open Challenges / Satish Narayana Srirama -- Edge Devices: A Survey, Use Cases and Future Challenges / Cosmin Avasalcai -- Deep Learning in the Era of Edge Computing: Opportunities and Challenges / Mi Zhang -- Caching, Security, and Mobility in Content Centric Networking / Osman Khalid -- Security and Privacy Issues in Fog Computing / Hasan Ali Khattak -- How Fog Computing Can Support Latency/Reliability-sensitive IoT Applications: An Overview and a Taxonomy of State-of-the-Art Solutions / Sajal Das -- Harnessing the Computing Continuum for Programming Our World / Jack Dongara -- Fog Computing for Energy Harvesting-Enabled Internet of Things / George K. Karagiannidis -- Optimizing Energy Efficiency of Wearable Sensors Using Fog-assisted Control / Delaram Amiri -- Latency Minimization Through Optimal Data Placement in Fog Computing / Ning Wang -- Modeling and Simulation of Distributed Fog Environment using FogNetSim++ / Asad W. Malik -- Distributed Machine Learning for IoT applications in the Fog / Flavia Delicato -- Fog Computing based Communication Systems for Modern Smart Grids / Mirjana Maksimovic -- An Estimation of Distribution Algorithm to Optimize the Utility of Task Scheduling under Fog Computing System / Chu-ge Wu -- Reliable and Power-Efficient Machine Learning in Wearable Sensors / Parastoo Alinia -- Insights into Software Defined Networking and Applications in

Fog Computing / Osman Khalid -- Time-Critical Fog Computing for Vehicular Networks / Neeraj Suri, Chebaane Ahmed -- A Reliable and Efficient Fog-based Architecture for Autonomous Vehicular Networks / Shuja Mughal -- Fog Computing to enable Geospatial Video Analytics for Disaster-incident Situational Awareness / Prasad Calyam -- An Insight into 5G Networks with Fog Computing / Osman Khalid -- Fog Computing for Bioinformatics Problems / Usman Habib.

Sommario/riassunto

"This book focuses on the technological aspects of employing fog computing in various application domains, such as smart healthcare, industrial process control and improvement, smart cities, and virtual learning environments. In addition, the Machine-to-Machine (M2M) communication methods for fog computing environments are covered in depth. The book includes important topics such as energy efficiency and Quality of Service (QoS) issues, reliability and fault tolerance, load balancing, and scheduling in fog computing systems. Special attention is devoted to emerging trends and the industry needs associated with utilizing the mobile edge computing, Internet of Things (IoT), resource and pricing estimation, and virtualization in the fog environments. The aforementioned topics will provide a platform for researchers, practitioners, and graduate students from computer science, computer engineering, and various other disciplines to gain a deep understanding of fog computing"--
