| Record Nr. | UNINA9910366587103321 |
|-------------------------|--|
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| Titolo | Fog-Enabled Intelligent IoT Systems / / by Yang Yang, Xiliang Luo, Xiaoli Chu, Ming-Tuo Zhou |
| Pubbl/distr/stampa | Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020 |
| ISBN | 3-030-23185-2 |
| Edizione | [1st ed. 2020.] |
| Descrizione fisica | 1 online resource (230 pages) : illustrations |
| Disciplina | 004.678 004.6782 |
| Soggetti | Electrical engineering Signal processing |
| | Speech processing systems |
| | Application software |
| | Communications Engineering, Networks |
| | Signal, Image and Speech Processing |
| | Information Systems Applications (incl. Internet) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Nota di contenuto | Introduction IoT technologies and applications Fog computing architecture and technologies Challenges and solutions for cross- domain applications Fog-enabled intelligent transportation system Fog-enabled smart home and user behavior recognition Fog- enabled industrial 4.0 Fog-enabled wireless network self- optimization Conclusion. |
| Sommario/riassunto | This book first provides a comprehensive review of state-of-the-art IoT technologies and applications in different industrial sectors and public services. The authors give in-depth analyses of fog computing architecture and key technologies that fulfill the challenging requirements of enabling computing services anywhere along the cloud-to-thing continuum. Further, in order to make IoT systems more intelligent and more efficient, two fog-enabled frameworks with detailed technical approaches are proposed for realistic application |

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scenarios with no or limited priori domain knowledge, i.e. physical laws, system statuses, operation principles and execution rules. Based on these fog-enabled frameworks, a series of data-driven self-learning applications in different industrial sectors and public services are investigated and discussed, such as Intelligent Transportation System, Smart Home, Industrial 4.0, Wireless Network Self-Optimization, and User Behavior Recognition. Finally, the advantages and future directions of fog-enabled intelligent IoT systems are summarized in terms of service flexibility, scalability, quality, maintainability, cost efficiency, as well as latency. Provides a comprehensive review of state-of-the-art IoT technologies and applications in different industrial sectors and public services Presents a fog-enabled service architecture with detailed technical approaches for realistic cross-domain application scenarios with limited prior domain knowledge Outlines a series of data-driven self-learning applications (with new algorithms) in different industrial sectors and public services.