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   Soggetti            Electrical engineering
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   Nota di bibliografia    Includes bibliographical references and index.

   Nota di contenuto   Introduction -- Part I: WSN integrated IoT applications -- IoT Applications for eHealth, smart cities -- Hybrid networks for smart environment -- Smart Metering -- Intelligent Transportation Systems -- Vehicular communication networks -- Part II: Wireless Communication protocols for smart environment -- Localization problems -- Protocols for WSN -- Cross layer design issues -- Prototypes for new applications for WSNs and IoT -- Delay tolerant models for IoT applications -- QoS enhancements -- Protocols and architectures for Industrial IoT -- Health care solution and data analytics in hospital environment -- Role of AI and bio inspired computing in decision making -- Deep learning concepts aiding smart city applications -- Part III: Energy optimization and security -- Energy efficient protocols -- Power optimization algorithms -- Challenges in data gathering and processing -- Security, privacy and trust in the IoT context -- Handling network failure during critical duration -- Trust models and digital signature concepts for resource starving embedded systems -- Reliability analysis and fault tolerant architecture for IoT

and Edge Computing -- Conclusion.

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|---|---|
| Sommario/riassunto | This book exploits the benefits of integration of wireless sensor networks (WSN) and Internet of Things (IoT) for smart cities. The authors discuss WSN and IoT in tackling complex computing tasks and challenges in the fields of disaster relief, security, and weather forecasting (among many others). This book highlights the challenges in the field of quality of service metrics (QoS) in the WSN based IoT applications. Topics include IoT Applications for eHealth, smart environments, intelligent transportation systems, delay tolerant models for IoT applications, protocols and architectures for industrial IoT, energy efficient protocols, and much more. Readers will get to know the solutions of these problems for development of smart city applications with the integration of WSN with IoT. Discusses the benefits of integration of wireless sensor networks (WSN) and Internet of Things (IoT) for smart cities; Provides tools for the challenges faced by the researchers in the integration of WSN and IoT; Presents a solution for the problems in the connectivity and communication of heterogeneous devices. |