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Nota di contenuto	Part I Platforms and Design Methodologies for IoT Hardware -- 1 - Shaping Configurable Micro-Processors for IoT Devices -- 2 Shaping Configurable Micro-Processors for IoT Devices -- 3 AXIOM a Flexible Platform for the Smart Home -- PArt II Simulation, Modeling and Programming Frameworks for IoT -- 4 Internet of Things Simulation using OMNeT++ and Hardware in the Loop -- 5 Towards Self-Adaptive IoT Applications: Requirements and Adaptivity Patterns for a Fall-Detection Ambient Assisting Living Application -- 6 Small Footprint JavaScript Engine -- 7 VirISA Recruiting Virtualization and Reconfigurable Processor ISA for Malicious Code Injection Protection -- Part III Opportunities, Challenges and Limits in WSN Deployment for IoT -- 8 Deployment Strategies of Wireless Sensor Networks for IoT: Challenges, Trends and Solutions Based on Novel Tools and HW/SW Platforms -- 9 Wireless Sensor Networks for the Internet of Things barriers and synergies -- 10 Event Identification in Wireless Sensor Networks -- Part IV Efficient Data Management and Decision Making for

IoT -- 11 Integrating IoT and Fog Computing for Healthcare Service Delivery -- 12 Supporting Decision Making for Large-Scale IoTs: Trading Accuracy with Computational Complexity -- 13 Fuzzy Inference Systems Design Approaches for WSNs -- Part V Use Cases for IoT -- 14 IoT in Ambient Assistant Living Environments: A View from Europe -- 15 Software Design and Optimization of ECG Signal Analysis and Diagnosis for Embedded IoT Devices -- 16 Design for a System of Multimodal Interconnected ADL Recognition Services -- 17 IoT Components for Secure Smart Building Environments -- 18 Building Automation Systems in the World of Internet of Things.

Sommario/riassunto

This book serves as a single-source reference to the state-of-the-art in Internet of Things (IoT) platforms, services, tools, programming languages, and applications. In particular, the authors focus on IoT-related requirements such as low-power, time-to-market, connectivity, reliability, interoperability, security, and privacy. Authors discuss the question of whether we need new IoT standardization bodies or initiatives, toward a fully connected, cyber-physical world. Coverage includes the research outcomes of several, current European projects related to IoT platforms, services, APIs, tools, and applications. Provides readers with a single-source reference to the state-of-the-art in Internet of Things (IoT) platforms, services, tools, programming languages, and applications; Includes research outcomes of several, current European projects on IoT-related requirements such as low-power, reliability, interoperability, security, and privacy; Enables a multi-disciplinary audience to understand the primitives for designing the next generation of cyber-physical systems and associated devices.