1. Record Nr. UNINA9910897981603321

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Titolo	Springer Handbook of Internet of Things / / edited by Sébastien Ziegler, Renáta Radócz, Adrian Quesada Rodriguez, Sara Nieves Matheu Garcia
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-39650-2
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (998 pages)
Collana	Springer Handbooks, , 2522-8706
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Disciplina	621.3
Soggetti	Electrical engineering Database management Production management Medical informatics Geography Electrical and Electronic Engineering Database Management System Operations Management Health Informatics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction -- Part A: IoT Basics -- IoT Brief History -- IoT Definitions -- IoT Tags - IoT Hardware -- Part B: IoT Network Architecture and Interoperability -- Architecture -- Cloudification/IoT Platforms -- Edge Computing and Distributed Intelligence -- Multiprotocol Interoperability -- Wireless Communication -- Integration of IoT and Satellite Networks in Emerging 5G Systems -- Part C -- IoT Security and Privacy -- IoT Security Threats and Risk Analysis -- Authentication and Authorization Framework for IoT -- IoT Security Monitoring Tools and Models -- Trusted IoT and Testing -- Part D: From Data to Knowledge and Intelligence -- IoT and Data Protection -- Data Models and Contextual Information -- Ontologies and Semantic

Interoperability -- Data Analytics and Artificial Intelligence -- Artificial Intelligence of Things -- Part E: Standards -- Study of LoRa PHY Protocol and LoPaWAN Networcs -- Application Layer Protocols -- Security Fundamentals -- Part F: Application Domains -- Smart Cities -- Smart Agriculture -- Making Smart Agriculture Smarter -- Optimizing Operations in IoT Enabled Smart Grid -- IoT in Large Scale Events -- Smart Homes and Buildings -- Connected Vehicles -- eHealth and Ageing Well -- IoT for Sustainable Development -- Technological views for IoT for Sustainable Development -- Smart water management -- Part G: End-User Engagement and validation -- End-User Engagement Methodologies -- Co-Creation -- Living Labs -- Crowdsourcing tools and IoT Labs -- Part H: IoT Deployment and Management -- IoT roadmap for smart factories and supply chain organizations -- IoT Business Models.

Sommario/riassunto

This handbook is an authoritative, comprehensive reference on Internet of Things, written for practitioners, researchers, and students around the world. This book provides a definitive single point of reference material for all those interested to find out information about the basic technologies and approaches that are used to design and deploy IoT applications across a vast variety of different application fields spanning from smart buildings, smart cities, smart factories, smart farming, building automation, connected vehicles, and machine to machine communication. The book is divided into ten parts, each edited by top experts in the field. The parts include: IoT Basics, IoT Hardware and Components, Architecture and Reference Models, IoT Networks, Standards Overview, IoT Security and Privacy, From Data to Knowledge and Intelligence, Application Domains, Testbeds and Deployment, and End-User Engagement. The contributors are leading authorities in the fields of engineering and represent academia, industry, and international government and regulatory agencies.