Record Nr. UNINA9910337467403321 The Internet of Things for Smart Urban Ecosystems / / edited by Franco Titolo Cicirelli, Antonio Guerrieri, Carlo Mastroianni, Giandomenico Spezzano, Andrea Vinci Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-96550-6 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (389 pages) Collana Internet of Things, Technology, Communications and Computing, , 2199-1073 307.760285 Disciplina Soggetti Signal processing Image processing Speech processing systems Application software Urban geography Urban economics Signal, Image and Speech Processing Information Systems Applications (incl. Internet) Urban Geography / Urbanism (inc. megacities, cities, towns) **Urban Economics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto A Social and Pervasive IoT Platform for Developing Smart Environments -- Smart City Platform Specification: a modular approach to achieve interoperability in Smart Cities -- Integrated Cyber Physical Assessment and Response for Improved Resiliency -- On the Integration of Information Centric Networking and Fog Computing for Smart Home Services -- Optimal Placement of Security Resources for the Internet of Things -- Embedding Internet-of-Things in Large-Scale Socio-Technical Systems: A Community-Oriented Design in Future Smart Grids -- Aggregation Techniques for the Internet of Things: an overview -- Swarm Intelligence and IoT-based Smart Cities: a Review --

Cost saving and ancillary service provisioning in green Mobile Networks

-- Structural Health Monitoring (SHM) -- A Smart air-conditioning plant for efficient energy buildings -- A comprehensive approach to stormwater management problems in the next generation drainage networks -- Cooperative video-surveillance framework in Internet of Things (IoT) domain -- Personal Connected Devices for Healthcare -- Evacuation and Smart Exit Sign System.

Sommario/riassunto

The main objective of this book is to provide a multidisciplinary overview of methodological approaches, architectures, platforms, and algorithms for the realization of an Internet of Things (IoT)-based Smart Urban Ecosystem (SUE). Moreover, the book details a set of realworld applications and case studies related to specific smart infrastructures and smart cities, including structural health monitoring, smart urban drainage networks, smart grids, power efficiency, healthcare, city security, and emergency management. A Smart Urban Ecosystem (SUE) is a people-centric system of systems that involves smart city environments, applications, and infrastructures. SUEs require the close integration of cyber and physical components for monitoring, understanding and controlling the urban environment. In this context, the Internet of Things (IoT) offers a valuable enabling technology, as it bridges the gap between physical things and software components, and empowers cooperation between distributed, pervasive, and heterogeneous entities.