

1. Record Nr.	UNINA9911019111403321
Autore	Dhanaraj Rajesh Kumar
Titolo	Networked Sensing Systems
Pubbl/distr/stampa	Newark : , : John Wiley & Sons, Incorporated, , 2025 ©2025
ISBN	9781394310890 1394310897 9781394310876 1394310870 9781394310883 1394310889
Edizione	[1st ed.]
Descrizione fisica	1 online resource (408 pages)
Altri autori (Persone)	SathyamoorthyMalathy SBalasubramaniam KadrySeifedine <1977->
Disciplina	681.2
Soggetti	Sensor networks
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Networked Sensing Systems is essential for anyone seeking innovative and sustainable solutions across diverse sectors. It explores the integration of cutting-edge IoT technologies and digital transformation aimed at enhancing resource efficiency and addressing climate change challenges. With today's advancements in wireless and mobile connectivity, Internet of Things (IoT) sensor technologies, and digital innovation, sustainability principles are increasingly reinforcing one another. To transition to more resource-efficient solutions, use resources responsibly, and streamline operations, businesses must embrace digital transformation. Potential application areas include energy management, air pollution monitoring, fleet management, water management, and agriculture. Simultaneously, the expansion of IoT deployments and their integration into the contexts of 5G and emerging 6G mobile networking necessitate that the solutions

themselves be green and sustainable. This includes incorporating energy- and environmentally-conscious technical solutions for communications. By offering previously unattainable solutions, networked sensing can contribute to a more sustainable society by enabling the collection of data from heterogeneous sources in unique and novel ways. Additionally, the networking-based solutions themselves must be sustainable and environmentally friendly. For example, optimizing network architecture and relocating network equipment to strategic locations can significantly reduce energy waste. These goals drive the search for improved sensing technologies, emphasizing energy-efficient mobile sensing devices. The goal of Networked Sensing Systems is to present and highlight the latest developments in sustainable networked sensing systems across a variety of contexts, all united by the aim of enhancing human well-being and combating climate change. Regardless of the area of expertise, this work seeks to offer practical solutions to the major challenges of building a sustainable smart society 5.0. This book serves as a platform to discuss networked sensing systems for a sustainable society, focusing on systems and applications based on mobile computing and wireless networks, while adopting multidisciplinary approaches that emphasize the human element in addressing these challenges.

---