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Titolo	Intelligent data sensing and processing for health and well-being applications // edited by Miguel Wister [and three others]
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ISBN	0-12-812130-0 0-12-812320-6
Descrizione fisica	1 online resource (316 pages)
Collana	Intelligent data centric systems
Disciplina	613.028553
Soggetti	Health - Data processing
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Part 1. Introduction to smart sensors -- Charting the past, present, and future in mobile sensing research and development -- Data fusion architecture of heterogeneous sources obtained from a smart desk -- Wireless sensor technology for intelligent data sensing: research trends and challenges -- Part 2. Sensing in health and well-being applications -- Tangible user interfaces for ambient assisted working -- Ambient assisted working applications: sensor applications for intelligent monitoring in workplace for well-being -- Home automation architecture for comfort, security, and resource savings -- Security, privacy, and ethical issues in smart sensor health and well-being applications -- Diagnosing medical conditions using rule-based classifiers -- Part 3. Smart sensor application for health and well-being applications -- Assessing the perception of physical fatigue using mobile sensing -- Applications to improve the assistance of first aiders in outdoor scenarios -- Indoor activity tracking for elderly using intelligent sensors -- User-centered data mining tool for survival-mortality classification of breast cancer in Mexican-origin women -- Modeling independence and security in Alzheimer's patients using fuzzy logic -- Wireless sensor networks applications for monitoring environmental variables using evolutionary algorithms.
Sommario/riassunto	Intelligent Data Sensing and Processing for Health and Well-being

Applications uniquely combines full exploration of the latest technologies for sensor-collected intelligence with detailed coverage of real-case applications for healthcare and well-being at home and in the workplace. Forward-thinking in its approach, the book presents concepts and technologies needed for the implementation of today's mobile, pervasive and ubiquitous systems, and for tomorrow's IoT and cyber-physical systems. Users will find a detailed overview of the fundamental concepts of gathering, processing and analyzing data from devices disseminated in the environment, as well as the latest proposals for collecting, processing and abstraction of data-sets. In addition, the book addresses algorithms, methods and technologies for diagnosis and informed decision-making for healthcare and well-being. Topics include emotional interface with ambient intelligence and emerging applications in detection and diagnosis of neurological diseases. Finally, the book explores the trends and challenges in an array of areas, such as applications for intelligent monitoring in the workplace for well-being, acquiring data traffic in cities to improve the assistance of first aiders, and applications for supporting the elderly at home.--
