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Soggetti	Biomedical engineering Geriatrics Management Industrial management Medical economics Biomedical Engineering and Bioengineering Geriatrics/Gerontology Innovation/Technology Management Health Economics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	A low-cost sensor for real-time monitoring of indoor thermal comfort for ambient assisted living -- A novel device for contactless detection of small body movements dedicated to people with severe mobility impairments -- Improved UWB Radar Signal Processing for the Extraction of Vital Parameters -- Near Field Communication technology for AAL -- Remote measurement of the respiration by electromagnetic sensing -- Robot Interface Design of domestic and condominium robot for ageing population -- Autonomous Assistive Robot for Respiratory Rate Detection and Tracking -- Tele presence Robot at Home: A Long-term Case Study -- A Multi-Agent Expert System Simulation for

Ambient Assisted Living: the Virtual Carer Experience -- Expert System for Wearable Fall Detector -- Quality of Kinect Depth Information for Passive Posture Monitoring -- A Wearable Multi-Sensors Device for AAL Environment -- RGBD sensors for human activity detection in AAL environments -- MyCmon – Cloud-Based Smart Home Monitoring For Elderly People And People With Disabilities -- Cognitive Home Rehabilitation in Alzheimer’s Disease Patients by a Virtual Personal Trainer -- Experimentation of an integrated system of services and AAL solutions for Alzheimer’s Disease patients and their caregivers in Marche: The UP-TECH project -- Virtual reality: a new rehabilitative approach in neurological disorders -- Can the current mobile technology help for medical Assistance? The case of Freezing of Gait in Parkinson Disease -- Electromagnetic sensing of obstacles for visually impaired users -- Multi-agent Simulation Model for Evacuation of Care Homes and Hospitals for Elderly and People with Disabilities in Motion -- An inertial and QR code landmarks-based navigation system for impaired wheelchair users -- Towards an impact assessment framework for ICT-based systems supporting older people: Making evaluation comprehensive through appropriate concepts and metrics -- Brain.me: a Low-Cost Brain Computer Interface for AAL Applications -- A Speech Interaction System for an Ambient Assisted Living Scenario -- A Novel Tracking System for AAL Based on Smartphone Technology -- BAR LIS: a web tool for Italian Sign Language Synthesis and Interaction -- OMNIACARE: A comprehensive technological platform for AAL -- From Sensor Data to User Services in GIRAFFPLUS -- A WSN integrated solution system for technological support to the self-sufficient elderly -- RITA Project: an Ambient Assisted Living solution for independent and safely living of aging population -- Smart Technologies in Social Housing: Methodology and First Results of the HOST Project Experimentation Activities -- Smart Object for AAL: a Review -- Living in the Living Lab! Adapting two model domotic apartments for experimentation in autonomous living in a context of residential use -- Preliminary findings of the AALIANCE2 Ambient Assisted Living Roadmap -- The third age in the national health system: a proposal for increasing the spending effectiveness in health care for the elderly -- Active ageing and public space: the creative city 3.0 -- “Smart” social housing design: methods, tools and innovation in the Assisted Living architectural project -- On the Design of Intelligent Buildings for Ambient Assisted Living -- Architectures for alternative mobility and relational fields: innovative people-oriented approaches.

Sommario/riassunto

This book presents the refereed proceedings of the Fourth Italian Forum on Ambient Assisted Living (AAL), held in Ancona, Italy, in October 2013. A wide range of issues are covered, and new technological developments are described which will support the autonomy and independence of individuals with special needs through an innovative and integrated approach, designed to respond to the socio-economic challenges of an aging population. Topics addressed include: health and well-being, prevention and rehabilitation, and support for care providers; active aging and its social implications; services for the frail elderly with health problems and their families; nutrition; ICT platforms/technologies for the benefit of the elderly; home automation and control technologies (autonomy, safety, and energy saving); smart cities and smart communities; telemedicine, telerehabilitation, and telecare; mobility, participation, and social inclusion; games and fun for the elderly; building design; social housing; interface design and interaction (accessibility, acceptance); social policies to encourage and support active aging; business models, market analysis, and development of sustainable financing and

business; and ethics, privacy, and data protection. Many experimental validations based on user trials and usability testing are presented and discussed. The knowledge and insights provided in this book will help researchers and others involved in AAL to understand relevant societal trends, novel technological developments, and pressing challenges.
