Contents

Part I  Social Participation and Mobility

Design and Evaluation of a Second Screen Communication and Gaming Platform to Foster Teleparticipation of the Socially Isolated Elderly .................................................. 3
Jakob Doppler, Gernot Rottermanner, Sabine Sommer, Johannes Pflegerl and Peter Judmaier

Designing and Introducing an Activity Motivating Mobile Web App Platform for Seniors .............................. 15
Christian Lins, Melina Frenken, Luca Halder and Andreas Hein

Model-Based Approach for Posture and Movement Classification in Working Environments ................................ 25
Christian Lins, Sebastian M. Müller and Andreas Hein

Part II  Sensor Data Analysis

Continuous Geriatric Assessments Supported by a Mobile Service Robot: Movement Analysis .............................. 37
Melvin Isken and Andreas Hein

Inferring Multi-person Presence in Home Sensor Networks .......................... 47
Sebastian M. Müller, Enno-Edzard Steen and Andreas Hein

Part III  Acceptance Factors and Barriers

Implementing Data Protection and Information Security in AAL .......................... 59
Oliver Stutz, Sascha Todt, Sven Venzke-Caprarese, Susanne Boll, Wilko Heuten and Torben Wallbaum
Part IV Human-Computer Interaction

Development and Evaluation of an Assistive Workstation for Cloud Manufacturing in an Aging Society ........................... 71
T. Linner, J. Güttler, C. Georgoulas, A. Zirk, E. Schulze and T. Bock

Jochen Britz, Jan Alexandersson and Werner Stephan

Ethical and Legal Aspects of an AAL System Supporting Night Care in Residential Care ..................................................... 97
Marjo Rauhala, Paul Panek, Katharina Werner and Walter Fuchs

Part V Social Participation and Communication

Design and Implementation of a Concept for Two-Way Exchange and Network Building of Professionals from Different Working Fields Within the Context of AAL .............................................. 111
Melanie Heußner, Birte Löffler and Ludger Schmidt

Chat-Machine: An Approach to a New Intergeneration Social Device for Elderly People ....................................................... 123
D. Orradre, S. Heuer, L. Jungmann, C. Becker and C. Klotz

Part VI Basic Technologies, The Future of Technology

A Novel Interface for Intuitive Control of Assistive Robots Based on Inertial Measurement Units ........................................... 137
Nina Rudigkeiten, Marion Gebhard and Axel Gräser
Ambient Assisted Living
8. AAL-Kongress 2015, Frankfurt/M, April 29-30, April, 2015
Wichert, R.; Klausing, H. (Eds.)
2016, X, 146 p. 62 illus., 10 illus. in color., Hardcover
ISBN: 978-3-319-26343-4