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This book series was started in 1990 to promote research conducted under the auspices of the EC programmes’ Advanced Informatics in Medicine (AIM) and Biomedical and Health Research (BHR) bioengineering branch. A driving aspect of international health informatics is that telecommunication technology, rehabilitative technology, intelligent home technology and many other components are moving together and form one integrated world of information and communication media. The series has been accepted by MEDLINE/PubMed, SciVerse Scopus, EMCare, Book Citation Index – Science and Thomson Reuters’ Conference Proceedings Citation Index.

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ISSN 0926-9630 (print)
ISSN 1879-8365 (online)
Digital Healthcare Empowering Europeans
Proceedings of MIE2015

Edited by
Ronald Cornet
Department of Medical Informatics, Academic Medical Center – University of Amsterdam, The Netherlands
Department of Biomedical Engineering, Linköping University, Sweden

Lăcrămioara Stoicu-Tivadar
Faculty of Automation and Computers, University Politehnica Timişoara, Romania

Alexander Hörbst
Research Division for eHealth and Telemedicine, UMIT – University for Health Sciences, Medical Informatics and Technology, Hall in Tyrol, Austria

Carlos Luis Parra Calderón
Hospitales Universitarios Virgen Macarena y Virgen del Rocio, Sevilla, Spain

Stig Kjær Andersen
Department of Health Science and Technology, Aalborg University, Denmark
and

Mira Hercigonja-Szekeres
University of Applied Health Studies, Zagreb, Croatia

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Preface

This volume contains the proceedings of the MIE2015 conference, “Digital healthcare empowering Europeans”, highlighting the impact that digitisation has on all citizens, medical staff, patients and their carers. Over decades digitisation of healthcare has become almost ubiquitous, spreading from healthcare organisations into the homes and personal appliances of practically every citizen. Similarly, biomedical and health informatics has spread from dedicated manufacturers to the largest information technology companies.

MIE2015, the 26th Medical Informatics in Europe Conference, has been jointly organised by the European Federation for Medical Informatics (EFMI) and the Spanish Society of Health Informatics (SEIS), organisations which were both established in 1976. MIE2015 takes place in the splendid city of Madrid, Spain, from May 27th to 29th, 2015. EFMI is a federation of national medical informatics associations from 30 European countries, and its purpose is to develop and disseminate knowledge and expertise in the field of biomedical and health informatics. Besides the national associations, the working groups, which include experts in specialist fields ranging from electronic patient records, medical imaging, and evaluation to nursing and rehabilitation, are the main channel through which new knowledge and ideas are developed and disseminated.

“Digital healthcare empowering Europeans”, the theme of MIE2015, is addressing a range of important aspects, relating to opportunities for or impact of new approaches and IT tools in day-to-day life affecting the citizens. The conference theme aligns with collective efforts of multiple parties: patients, care providers, system developers, researchers, and ultimately the entire population of Europe to join in to enjoy benefits that digitisation of health information offers. Digitisation enables involvement of people in management of their own health and empowers people to be in more control of all aspects of their health and for the care they require. The conference provokes discussions of inherent challenges to design and adequately deploy ICT tools, to assess health IT interventions, train users, and exploit available information and knowledge to scrutinise visions for continuous and ubiquitous availability and interoperability in health care. MIE2015 brings together participants that share their latest achievements in biomedical and health informatics, including the role of the user in digital healthcare, where interdisciplinary collaboration may achieve care, and treatment processes supporting quality of life for citizens, healthcare providers, and the society. Contributions address methodologies and applications, success stories and lessons learned as well as an outlook on on-going projects and directions for the future.

The editors would like to thank all the authors from 43 countries for their excellent work as well as the 310 reviewers for lending their expertise to the conference, thereby contributing to the final achievements. Special thanks go to the Spanish Local Organizing Committee for the contribution in hosting the conference and to EFMI President Anne Moen for her constant commitment to a great event.

Ronald Cornet, Lăcrămioara Stoicu-Tivadar, Alexander Hörbst, Carlos Luis Parra Calderón, Stig Kjaer Andersen, Mira Hercigonja-Szekeres
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