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Preface

This volume contains the works presented at the 6th International Work-Conference on Ambient Assisted Living (IWAAL 2014) held in Belfast during December 2–5, 2014. This event was established in 2009, inspired by the European Union’s Ambient Assisted Living Joint Program (AAL JP). The ageing of the population has immense impact on national healthcare systems throughout all developed countries in relation to the increasing burdens being placed on the provision of health and social care. Predictions have estimated that by 2020 around one quarter of the European population will be over 65. This will make healthcare systems almost unable to sustain adequate delivery of care provision unless new models of care, prevention, and social integration are introduced. The AAL JP has a core strategy to support the development of solutions to improve the delivery of care and increase levels of independence for an ageing population.

Information and communication technologies provide a way toward a new paradigm of advanced systems aimed at both preventing and managing long-term healthcare conditions in addition to de-hospitalizing care provision. The interest of healthcare stakeholders is continuously growing around such technological solutions that help address the impact of the ageing of the population. As a result, Ambient Assisted Living (AAL) is becoming a well-recognized domain. AAL relates to the use of ICT technologies and services in both daily living and working environments aiming to help inhabitants by preventing health conditions and improving wellness, in addition to assisting with daily activities, promotion of staying active, remaining socially connected and of living independently.

The theme of this year’s event was “Ambient Assisted Living and Daily Activities.” This year, once again, IWAAL collected a remarkable set of scientific works reporting new methods, methodologies, algorithms, and tools specifically devised to address AAL research challenges. In addition, a variety of assistive applications that harness the benefits of sensing technologies, human–computer interaction, and ambient intelligence were included.

Moreover, some valuable case studies and trials in which healthcare technologies for AAL have been tested to prove their cost-effectiveness were collected. This reflects the growing awareness that one of the problems blocking the adoption of AAL in every-day practice is the lack of well-designed Health Technology Assessment (HTA) studies capable of assessing the real impact of AAL on healthcare systems and society as a whole. Taking this into consideration, for the first time, a special session on “HTA of Healthcare Telematics” was organized during IWAAL in collaboration with the HTA Division of the International Federation of Medical and Biological Engineering (IFMBE). These contributions are also included in these proceedings.

The review process of the material submitted was supported by over 70 members from an international Program Committee. This included members from
the following countries in Europe: Czech Republic, the UK, Spain, Italy, Austria, Belgium, England, Germany, The Netherlands, France, and Cyprus; it was further supported by members from the USA, Canada, Mexico, Chile, Panama, and Costa Rica. Each paper was allocated up to three reviewers and the final decision was made in consultation with the workshop co-chairs.

In the present edition, 62 papers were submitted with an acceptance rate of 51%. The final set of papers represents a truly international perspective of research with authors from countries including: Argentina, Australia, Austria, Canada, Chile, Costa Rica, Croatia, Cyprus, Finland, Germany, Greece, Iran, Italy, Japan, Korea, Mexico, The Netherlands, Norway, Panama, Portugal, Spain, Sweden, UK, and USA.

To conclude, we wish to thank all authors for their contributions and the members of the Program Committee for their time and effort for reviewing and for helping us to realize a top-quality conference and to produce this volume.

December 2014

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