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# Ambient Assisted Living and Active Aging

5th International Work-Conference, IWAAL 2013 Carrillo, Costa Rica, December 2-6, 2013 Proceedings



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## **Preface**

This volume contains the work presented at the 5th International Work Conference on Ambient Assisted Living (IWAAL 2013) held in Costa Rica during the 2nd–6th December, 2013. The event was established during 2009, inspired by the European Union's Ambient Assisted Living Joint Program (AALJP). The ageing of the population is concerning national healthcare systems throughout all developed countries in relation to the increasing burdens being placed on the provision of health and social care. Predictions are estimating that by 2020 around one quarter of the European population will be over 65. This will make healthcare systems almost unable to sustain an adequate delivery of care provision unless new models of care and prevention are introduced. The AALJP has as 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 are paving the way towards 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 based solutions which aim to address the effects 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 with the aim to help inhabitants by preventing and improving wellness and health conditions, 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 is Ambient Assisted Living and Active Aging. 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 have been included.

The review process of the material submitted was supported by over 60 members from an International Program Committee. This included members from the following countries in Europe: Czech Republic, Northern Ireland, Spain, Italy, Austria, Belgium, England, Germany, The Netherlands, France and Cyprus and was further supported by members from the United States of America, Canada, Mexico, Chile, Panama and Costa Rica. Each paper was allocated up to 3 reviewers with the final process of the review being guided by the two workshop co-chairs.

From the 23 papers submitted, 13 were accepted as full papers and 7 were recommended to revise and re-submit their original submissions as short papers. The final set of papers represents a truly international field of research with

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authors from 12 countries including: Jordan, Mexico, Costa Rica, Chile, United States of America, South Korea, Austria, England, Spain, Sweden, Finland and Northern Ireland.

To conclude, we wish to thank all organizers, members of the Program Committee and reviewers for helping us in realizing a top quality conference and producing this volume.

December 2013

Christopher Nugent Antonio Coronato José Bravo

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