

Preface

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Ambient intelligence refers to normal working and living environments being surrounded by embedded devices that can merge unobtrusively and in natural ways using information and intelligence hidden in the network connecting these devices (e.g. The Internet of Things). Such devices, each specialised in one or more capabilities, are intended to work together based on an infrastructure of intelligent systems, to provide a variety of services improving safety, security and the quality of life in ordinary living, travelling and working environments.

The 2018 European Conference on Ambient Intelligence (AmI 2018) has a focus on the role of Ambient Intelligence “Towards a Smart and Human-Centered Internet of Things”. In the present edition, we are pleased to include in this volume the proceedings of two workshops, which emphasize multi-disciplinary and transversal aspects of AmI, as well as cutting-edge topics:

- *1st Workshop on Behavioral Change and Ambient Intelligence for Sustainability (BRAINS)* – that looks into how to design, develop and evaluate systems that enable behavior capture and support behavior modeling so as to drive behavioral change using Ambient Intelligence. Certain challenges need to be overcome such as choosing the timing, modality, content, and the feedback systems of persuasive intervention strategies as well as the timing and modality of the systems that monitor the behaviour. Therefore, the multi-disciplinary nature of designing and implementing behavioral change strategies and systems are within the core of this workshop.
- *2nd Workshop on Affective Interaction with Avatars and Robots (WS-AFFIN)* – that examines the development of affective interaction by employing avatars, also known as Embodied Conversational Agents (ECAs), to achieve user engagement in several domains, including gaming, education, health, training, Active and Assisted Living (AAL) etc. Affective interaction involves several aspects like the recognition of the users affective state, based for example on speech and video processing, the computational modelling of the agents affective state and behaviour, selection of appropriate responses that are designed to influence the user affective, synthesis and expression of affect via animated facial and/or bodily expressions, dialogue management which gracefully handles errors and interruptions, etc. The workshop builds upon a wide range of different disciplines to continue the discussion on affective interaction with avatar and robot systems.

The proceedings contain a series of contributions reflecting the latest research developments in these selected areas, that are analytical, empirical, technological, methodological, or a combination of these. Papers reporting strong systems engineering contributions backed by solid and appropriate evaluations are strongly encouraged.

A total of 12 paper were submitted to the workshops. All submitted papers will undergo a rigorous review process handled by atleast 3 members of the Technical Program Committees.

We would like to thank all the contributing authors, as well as the members of the Organizing Committees and Technical Program Committees of the workshops for their highly valuable work, which contributed to the success of the 2018 European Conference on Ambient Intelligence.

The Workshops Chairs would like to take the opportunity to thank Professor Achilleas D. Kameas and Professor Kostas Stathis, the program chairs of AmI 20118, Professor George Roussos, the general chair of AmI 2018, for their trust in our work.

We are also grateful to the local staff that worked thoroughly for the success of this event and in particular Professor George Angelos Papadopoulos, the organizing chair of AmI 2018, whithout whom this event would not have been possible.