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Proceedings of the

AIxAS 2020

**Italian Workshop on Artificial Intelligence
for an Ageing Society**

Workshop co-located with AIxIA 2020, Anywhere

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Preface

This volume contains the papers presented at AIxAS 2020, Italian Workshop on Artificial Intelligence for an Ageing Society (<http://aixas2020.istc.cnr.it/>), held within the 19th International Conference of the Italian Association for Artificial Intelligence (AIXIA 2020), on November 27th, 2020.

The aim of this series of workshops is to bring together researchers interested in different aspects of Artificial Intelligence for an Ageing Society. The working group “Artificial Intelligence for Ageing Society” has previously organized several Workshops on Technological Challenges and Scenarios for the Ageing Society in Brescia, Palermo, Torino, Genoa, Bari, Trento and Rende to discuss about technological roles and opportunities for Artificial Intelligence in the Ageing Society domain. Capitalizing from these activities, the group is establishing a stable forum on the topic and organized the this workshop with the goal of collecting contributions, ideas and new scientific and technological scenarios, as well as to discuss and disseminate results on Artificial Intelligence for Aging Society.

Artificial Intelligence (AI) methods and techniques have and will have a pivotal role, due to the advanced goals of the discipline and its inner cross-disciplinary attitude, in order to deliver innovative and impacting results and related technologies. The development of new AI-based solutions to support and help older adults, as well as those close to them, to cope with the changes of ageing and cognitive decline represents one of the most advanced ICT areas in the AI field. Nevertheless, facing the problems of an ageing society requires a cross-disciplinary approach, too. For this reason, the transition from a workshop focused on Artificial Intelligence for Ambient Assisted Living, as in previous years, to a more pervasive workshop on Artificial Intelligence for an Aging Society became urgent to better reflect the multifactorial nature of aging process and the multidisciplinary efforts needed to face with it.

This year, each paper was reviewed by at least two members of the Program Committee of the Workshop, and on the basis of their recommendations, 11 documents have been selected for publication and presentation at AIxAS2020. In addition, the workshop was enriched by the valuable participation of Tomoo Matsuda as invited speaker. We sincerely thank all members of the AIxAS Program Committee for their effort in the review process that was fundamental for maintaining the high scientific level of the workshop. We thank the AIXIA council, who trusted us to organize AIxAS2020, and all the researchers of the AI community who supported this event by submitting their work and actively participating in this unusual but extremely fruitful and inspiring online form.

January 2021

Filippo Palumbo, Francesca Gasparini and Francesca Fracasso

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