

Preface

More and more individuals are increasingly in need of home and geriatric care. At the same time, qualified care personnel is increasingly scarce and expensive, such that ensuring adequate care for all has become a societal challenge. “Adequate” means more than body and health care; it also implies psychological and social care. In other words, caregivers are expected not only to provide nursing care, monitor the health conditions and medical prescription plans, or control the diet of a caretaker, but also to act and interact with caretakers as trustworthy companions. The tasks of a trustworthy companion of an elderly person are manifold. For instance, for an elderly person in need of care, it is important to be able to have someone with whom to share the daily life impressions, someone to provide hints on potentially interesting social and cultural events in their home town or to animate to undertake an outdoor activity, etc.

In view of the increasing maturity of verbal and non-verbal communication understanding and generation technologies, knowledge-based dialogue management techniques, external knowledge acquisition, and virtual character and robot design, the question on the use of conversational agents in health and care contexts has become increasingly prominent. Agents have been developed so far, for instance, for physical exercise instruction, question answering on health-related issues and mental and physical health coaching. For home and geriatric care applications, equally a number of implementations exist. However, the home and geriatric care context implies not only technical, but also ethical and data protection questions. These questions must be taken into account in order to comply with legal regulations and be accepted by the caretakers and, if applicable, by their legal representatives.

The Workshop on Intelligent Conversation Agents in Home and Geriatric Care Applications, held in conjunction with the International Conference on Autonomous Agents and Multiagent Systems (AAMAS) 2018 in Stockholm, brought together geriatricians and researchers working on different aspects of intelligent conversational agents and related topics in health and geriatric care. Its proceedings consist of eight papers. The first of them is based on the invited talk by Gerhard Eschweiler and presents an introduction to the geriatric care and its needs and challenges, including the ethical challenges and ethical assessment strategies. The other seven papers tackle a variety of technical aspects of the area, including, e.g., dialogue models for conversational agents that target elderly users, multiple party and multiple domain coaching agent setups, prosody modelling for reading aloud applications for elderly, and feedback provision to elderly, based on information obtained from sensors in their environment.

The preparation of the Proceedings of the Intelligent Conversation Agents in Home and Geriatric Care Applications Workshop was a challenging team effort. We would like to thank all authors for submitting their work and our keynote speaker. We are also grateful to the members of the Program Committee for their remarkable effort and the high quality of the reviews, and to the Workshop Chairs of the Federated AI Meeting (FAIM) 2018, which gathered under its umbrella AAMAS, IJCAI, ICML, ICCBR and SoCS, for their support.

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