

Preface

Research on agents and multi-agent systems has matured during the past decade and many effective applications of this technology are now deployed. An international forum to present and discuss the latest scientific developments and their effective applications, to assess the impact of the approach, and to facilitate technology transfer became a necessity and was created a few years ago.

PAAMS, the International Conference on Practical Applications of Agents and Multi-Agent Systems, is the international yearly event in which to present, to discuss, and to disseminate the latest developments and the most important outcomes related to real-world applications. It provides a unique opportunity to bring multi-disciplinary experts, academics, and practitioners together so as to exchange their experience in the development and deployment of agents and multi-agent systems.

This volume presents the papers that were accepted for the 2017 edition of PAAMS. These articles report on the application and validation of agent-based models, methods, and technologies in a number of key application areas, including: daily life and real world, energy and networks, humans and trust, markets and bids, models and tools, negotiation and conversation, and scalability and resources. Each paper submitted to PAAMS went through a stringent peer review by three members of the Program Committee composed of 112 internationally renowned researchers from 26 countries. From the 63 submissions received, 11 were selected for full presentation at the conference; another 11 papers were accepted as short presentations. In addition, a demonstration track featuring innovative and emergent applications of agent and multi-agent systems and technologies in real-world domains was organized. In all, 18 demonstrations were shown, and this volume contains a description of each of them.

We would like to thank all the contributing authors, the members of the Program Committee, the sponsors (IEEE SMC Spain, IBM, AEPIA, AFIA, APPIA, Universidad Politécnica de Madrid, Polytechnic Institute of Porto, and CNRS), and the Organizing Committee for their hard and highly valuable work. Their work contributed to the success of the PAAMS 2017 event. Thanks for your help – PAAMS 2017 would not exist without your contribution.

May 2017

Yves Demazeau
Paul Davidsson
Javier Bajo
Zita Vale

Advances in Practical Applications of Cyber-Physical
Multi-Agent Systems: The PAAMS Collection
15th International Conference, PAAMS 2017, Porto,
Portugal, June 21-23, 2017, Proceedings
Demazeau, Y.; Davidsson, P.; Bajo, J.; Vale, Z. (Eds.)
2017, XVI, 374 p. 157 illus., Softcover
ISBN: 978-3-319-59929-8