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Yves Demazeau · Eric Matson ·
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Advances in Practical Applications of Survivable Agents and Multi-Agent Systems

The PAAMS Collection


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Proceedings

Editors

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Grenoble Computer Science Laboratory
Grenoble, France

Juan Manuel Corchado 
University of Salamanca
Salamanca, Spain

Eric Matson
Purdue University
West Lafayette, IN, USA

Fernando De la Prieta 
University of Salamanca
Salamanca, Spain

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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 almost two decades ago.

PAAMS, the International Conference on Practical Applications of Agents and Multi-Agent Systems, is the international yearly tribune 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 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 2019 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: agronomy and the Internet of Things, coordination and structure, finance and energy, function and autonomy, humans and societies, reasoning and optimization, traffic and routing. Each paper submitted to PAAMS went through a stringent peer review by three members of the Program Committee composed of 154 internationally renowned researchers from 29 countries. From the 54 submissions received, ten were selected for full presentation at the conference; another eight 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, 14 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 Systems Man and Cybernetics Society Spain Section Chapter and the IEEE Spain Section; Technical Co-Sponsor), IBM, Indra, Viewnext, Global exchange, AEPIA, AFIA, APPIA, PU, CNRS and AIR institute. We thank the funding supporting with the project “*Intelligent and sustainable mobility supported by multi-agent systems and edge computing*” (Id. RTI2018-095390-B-C32) and also the Organizing Committee for their hard and highly valuable work. Their work contributed to the success of the PAAMS 2019 event.

Thanks for your help – PAAMS 2019 would not exist without your contribution.

June 2019

Yves Demazeau
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