Advances in Practical Applications of Heterogeneous Multi-Agent Systems

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Preface

Research on agents and multi-agent systems has matured during the last 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, has become 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 for presenting, discussing, and disseminating 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 2014 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: agent-oriented software engineering, conversations, motion coordination and unmanned aerial vehicles, Web and service systems, robotics exploration, smart cities and infrastructures, and social systems. Each paper submitted to PAAMS 2014 went through a stringent peer review by three members of the international committee composed of 97 internationally renowned researchers from 26 countries. From the 52 submissions received, 12 were selected for full presentation at the conference; another 14 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. There were 19 demonstrations 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, University of Salamanca and CNRS), and the Organizing Committee for their hard and highly valuable work. Their work helped contribute to the success of the PAAMS 2014 event. Thanks for your help – PAAMS 2014 would not exist without your contribution.

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