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# Agents and Artificial Intelligence

9th International Conference, ICAART 2017  
Porto, Portugal, February 24–26, 2017  
Revised Selected Papers



Springer

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# Preface

The present book includes 11 extended and revised versions of a set of selected papers from the 9th International Conference on Agents and Artificial Intelligence (ICAART 2017), held in Porto, Portugal, during February 24–26, 2017.

ICAART 2017 received 158 paper submissions from 45 countries, of which 7% are included in this book.

The selection procedure consisted of two phases. In the first phase, the event chairs selected a set of potentially eligible papers. Their selection was based on a number of criteria that included the classifications and comments provided by the Program Committee members, the session chairs' assessments, and also the program chairs' global view of all papers. The authors of the selected papers were then invited to submit a revised and extended version of their papers having at least 30% innovative material. The second phase started after the receipt of the extended papers. They were reviewed by members of the Program Committee, with emphasis on the scientific value of the augmented innovative material. Moreover, the size of the new material was critically scrutinized (on possessing at least 30% novel material).

The purpose of the book is to disseminate valuable scientific contributions to the field of agent technology and artificial intelligence. The International Conference on Agents and Artificial intelligence (ICAART) is an excellent means to serve this purpose by bringing together researchers, engineers, and practitioners interested in the theory and applications in these areas. Two simultaneous related tracks were held at the conference, covering both agent applications and front-ranked AI research work. The first track focused on agents, multi-agent systems, software platforms, distributed problem solving, and distributed AI in general. The second track focused mainly on artificial intelligence, knowledge representation, planning, learning, scheduling, perception, reactive AI systems, evolutionary computing, and other topics related to intelligent systems and computational intelligence.

The book consists of 11 contributions of high quality. For a list of the papers, we refer readers to the Table of Contents. The proceedings of ICAART 2017 cover the following topics: Knowledge Representation and Reasoning (3), Natural Language Processing (3), Planning and Scheduling (2), Multi-Agent Systems (1), Semantic Web (1), and Intelligent User Interfaces (1).

We would like to thank all the authors for their contributions and also the reviewers, who helped ensure the quality of this publication, for their constructive reports.

February 2017

Jaap van den Herik  
Ana Paula Rocha  
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