

# Preface

Nowadays, most computing systems from personal laptops/computers to cluster/grid/cloud computing systems are available for parallel and distributed computing. Distributed computing performs an increasingly important role in modern signal/data processing, information fusion and electronics engineering (e.g. electronic commerce, mobile communications and wireless devices). Particularly, applying artificial intelligence in distributed environments is becoming an element of high added value and economic potential. Research on Intelligent Distributed Systems has matured during the last decade and many effective applications are now deployed. The artificial intelligence is changing our society. Its application in distributed environments, such as the Internet, electronic commerce, mobile communications, wireless devices, distributed computing, and so on is increasing and is becoming an element of high added value and economic potential, both industrial and research. These technologies are changing constantly as a result of the large research and technical effort being undertaken in both universities and businesses.

The 14th International Symposium on Distributed Computing and Artificial Intelligence 2017 (DCAI 2017) is a forum to present applications of innovative techniques for solving complex problems in these areas. The exchange of ideas between scientists and technicians from both academic and business areas is essential to facilitate the development of systems that meet the demands of today's society. The technology transfer in this field is still a challenge and for that reason this type of contributions will be specially considered in this symposium. This conference is the forum in which to present application of innovative techniques to complex problems. This year's technical program will present both high quality and diversity, with contributions in well-established and evolving areas of research. Specifically, 58 papers were submitted from over 21 different countries (Angola, Austria, Belgium, Brazil, China, Colombia, Denmark, Ecuador, France, India, Ireland, Italy, Japan, Malaysia, Mexico, Poland, Portugal, Spain, Switzerland, Taiwan, Tunisia, USA), representing a truly "wide area network" of research activity. The DCAI'17 technical program has selected 41 papers and, as in past editions, it will be special issues in JCR-ranked journals such as *Neurocomputing*, and *International Journal of Knowledge and Information Systems*. These special

issues will cover extended versions of the most highly regarded works. Moreover, DCAI'17 Special Sessions have been a very useful tool in order to complement the regular program with new or emerging topics of particular interest to the participating community. Special Sessions that emphasize on multi-disciplinary and transversal aspects, such as *AI-driven methods for Multimodal Networks and Processes Modeling* and *Intelligent and Secure Management towards Smart Buildings and Smart Grids* have been especially encouraged and welcome.

This symposium is organized by the Polytechnic of Porto, the Osaka Institute of Technology and the University of Salamanca. The present edition was held in Porto, Portugal, from 21–23rd June, 2017.

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Sigeru Omatu  
Sara Rodríguez  
Gabriel Villarrubia  
Pedro Faria  
Paweł Sitek  
Javier Prieto

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