

# COGNITIVE 2013

## Foreword

The Fifth International Conference on Advanced Cognitive Technologies and Applications (COGNITIVE 2013), held between May 27 and June 1, 2013 in Valencia, Spain, targeted advanced concepts, solutions and applications of artificial intelligence, knowledge processing, agents, as key-players, and autonomy as manifestation of self-organized entities and systems. The advances in applying ontology and semantics concepts, web-oriented agents, ambient intelligence, and coordination between autonomous entities led to different solutions on knowledge discovery, learning, and social solutions.

We take here the opportunity to warmly thank all the members of the COGNITIVE 2013 Technical Program Committee, as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors who dedicated much of their time and efforts to contribute to COGNITIVE 2013. We truly believe that, thanks to all these efforts, the final conference program consisted of top quality contributions.

Also, this event could not have been a reality without the support of many individuals, organizations, and sponsors. We are grateful to the members of the COGNITIVE 2013 organizing committee for their help in handling the logistics and for their work to make this professional meeting a success.

We hope that COGNITIVE 2013 was a successful international forum for the exchange of ideas and results between academia and industry and for the promotion of progress in the field of advanced cognitive technologies and applications.

We are convinced that the participants found the event useful and communications very open. We hope that Valencia, Spain provided a pleasant environment during the conference and everyone saved some time to explore this historic city.

### **COGNITIVE 2013 Chairs:**

#### **COGNITIVE General Chair**

Jaime Lloret Mauri, Polytechnic University of Valencia, Spain

#### **COGNITIVE Advisory Chairs**

Hermann Kaindl, TU-Wien, Austria

Sugata Sanyal, Tata Institute of Fundamental Research - Mumbai, India

Petre Dini, Concordia University - Montreal, Canada / China Space Agency Center - Beijing, China

Po-Hsun Cheng (鄭伯璦), National Kaohsiung Normal University, Taiwan

Narayanan Kulathuramaiyer, UNIMAS, Malaysia

Jose Alfredo F. Costa, Universidade Federal do Rio Grande do Norte (UFRN), Brazil

**COGNITIVE IndUstry/Research Chair**

Qin Xin, Simula Research Laboratory, Norway