# **Advances in Intelligent Systems and Computing**

### Volume 1006

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Ambient Intelligence – Software and Applications –,10th International Symposium on Ambient Intelligence



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## **Preface**

Ambient intelligence (AmI) is a paradigm emerging from artificial intelligence, where computers are used as proactive tools assisting people with their day-to-day activities, making everyone's life more comfortable. Another main concern of AmI originates from the human–computer interaction domain and focuses on offering ways to interact with systems in a more natural way by means user-friendly interfaces. This field is evolving quickly as can be witnessed by the emerging natural language and gesture-based types of interaction.

The inclusion of computational power and communication technologies in everyday objects is growing, and their embedding into our environments should be as invisible as possible. In order for AmI to be successful, human interaction with computing power and embedded systems in the surroundings should be smooth and happen without people actually noticing it. The only awareness people should have arisen from AmI: more safety, comfort, and wellbeing, emerging in a natural and inherent way. ISAmI is the International Symposium on Ambient Intelligence, aiming to bring together researchers from various disciplines that constitute the scientific field of AmI to present and discuss the latest results, new ideas, projects, and lessons learned. Brand new ideas will be greatly appreciated as well as relevant revisions and actualizations of previously presented work, project summaries, and PhD thesis.

This year's technical program will present both high quality and diversity, with contributions in well-established and evolving areas of research. Specifically, 45 papers were submitted by authors from over 10 different countries (Brazil, Italy, Japan, Morocco, Portugal, Spain, Tunisia, or United States, among others), representing a truly "wide area network" of research activity. The ISAmI technical program has selected 22 papers, and as in past editions, it will be special issues in JCR-ranked journals such as information fusion, neurocomputing, sensors, processes, and electronics. Moreover, ISAmI'19 workshops 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.

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This symposium is organized by the Universidade do Minho, Technical University of Valencia, Hiroshima University, and University of Salamanca. The present edition was held in Avila, Spain, from June 26–28, 2019. We thank 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, APPIA and AIR institute, as well as the support of the Regional Government de Castilla y León (Spain) with the project "Desarrollo de Capacidades Tecnológicas en torno a la Aplicación Industrial de Internet de las Cosas (IOTEC)" (Id. 0123\_IOTEC\_3\_E- Project co-financed with FEDER funds, Interreg España-Portugal (PocTep)), and finally, the local organization members and the program committee members for their hard work, which was essential for the success of DCAI'19.

June 2019

Paulo Novais Jaime Lloret Pablo Chamoso Davide Carneiro Elena Navarro Sigeru Omatu

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