Preface

Hamid Aghajan a and Juan Carlos Augusto b

- ^a Department of Electrical Engineering, Stanford University, USA
- ^b School of Computing and Mathematics and Computer Science Research Institute, University of Ulster, UK

1. Thematic issue

Welcome to the 2nd issue of JAISE! This issue is a thematic issue on the topic of wearable sensors and computing. This issue is more closely concerned with the creation of Smart Environments which enable the deployment of Ambient Intelligence (AmI). Several fundamental concepts and techniques in AmI are developed based on the possibility to detect the presence, activity, and expression, and infer the state and intention of a user or users. This calls for systems and methods to sense, perceive, and interpret the situation, project a response based on available services, and then learn the user preferences over time. Such a user-centric dynamic interaction needs a confluence of sensed signals obtained from the user and the environment.

Wearable sensors allow humans to interact directly with the sensing system, and offer complementary measurements to those obtained by sensors installed in the environment. The area of wearable sensors is a very promising and exciting one with enormous potentials, which has only started to be explored in the last decade. As the set of papers included in this issue testify this area is already coming to fruition. Future technology most likely will involve a mix of both which will depend on the specific environment, application and users involved.

This thematic issue sets forth a collection of research results underpinned by these aims and notions. Diane Cook and WenZhan Song were invited to organize this issue, and an editorial note by them offers further insight into the role that wearable sensors and computing can play in bringing many applications to reality.

2. Upcoming issues

JAISE serves as a forum of discussion bridging the many research disciplines participating in the creation of Ambient Intelligence (AmI) and Smart Environments (SmE) concepts and applications. One of the areas rich in conceptual tools which can contribute to the fulfillment of the promise of AmI and SmE is Artificial Intelligence (AI). The next issue of JAISE will be a thematic issue on the contributions of AI to AmI. Anind Dey, Achilles Kameas, and Carlos Ramos have helped organized the issue, which will be the third of this first volume.

3. Upcoming events

Another healthy sign of growth in our area is the continuous strengthening of established events along with a growing number of other events that every year offer our community several opportunities for interaction and publication of results. One such established event which is looming in the horizon is the 5th International Conference on Intelligent Environments which this year will be hosted by the Technical University of Catalonia in Barcelona (Spain). This is so far one of the most internationally relevant fora available, attracting researchers and practitioners from all over the world. A related Call for Papers is located at the end of this issue. Other relevant and interesting events with complementary focus are being publicized in this issue.