Preface

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1. This issue

This issue of JAISE is composed of four papers. The review process for the papers in this issue was supervised by our editors Andres Muñoz Ortega, Jeannette Chin, Carles Gomez, and Matjaz Gams, whom we thank for their service.

Interactive displays have been proliferating in the past decade in kiosk applications in public areas and private businesses. Typical usage models have been advertisement, entertainment, and exhibition of information for visitors. The paper **"Designing interactive public displays in caring environments: A case study of OutLook"** by Kang et al. examines the use of interactive displays in elderly care environments as a tool to offer the feeling of connectedness and social wellness to the users. The paper reports on the design and evaluation of a concept display in which the users are offered views of different places and natural scenery, and provides a number of interactive features.

Independent living has been a major driver of technology development to support the elderly stay longer in their homes, even with difficulties in their daily activities. Assistive technologies consist of all forms of technical support that either provide an adaptation of the environment to make it more accommodating for people with a disability, or equip people with the means to compensate for their impairments. The paper **"Towards context-aware assistive applications for aging in place via real-life-proof activity detection"** by Caroux et al. reports on the application of a proposed activity monitoring framework, and examines the limitations of this approach by scaling it up and by demonstrating that it is applicable to context-aware assistive applications for aging in place.

Energy waste in residential buildings is a major contributor to the depletion of fossil energy resources, greenhouse gas emissions, and has heavy environmental impacts. Different approaches have been proposed to reduce energy consumption. These approaches primarily involve controlling energy consumption, implementation and control of renewable energy sources while guaranteeing comfort and safety for occupants. The paper **"Energy control in a hybrid residential building using MAS: A case study in Algiers"** by Bouguessa et al. proposes a home automation system for the control of energy in a hybrid residential building using multiple sources of electrical power. The system is developed with a multi-agent system approach. The main goals are optimizing energy consumption, managing the production system and ensuring residents safety, thermal and light comfort, and observing the occupant's preferences. The paper presents two simulations to evaluate the system's behaviour. The simulations are based on real climate data in a typical building located in Algiers.

Mobile phones have been used to create behaviour models for their owners as they go about their daily routines. Step counting algorithms have been applied to different areas such as well-being applications, games, and indoor navigation. Many existing step counting algorithms for smartphones use data from inertial sensors to infer the number of steps taken, but their usefulness in real-life situations is limited since typically only a few positions and orientations are supported. Moreover, the algorithms may suffer from dynamic orientation and position changes during walking. The paper **"Accurate position and orientation independent step counting algorithm for smartphones"** by Seo proposes to use both the accelerometer and gyroscope data to count the number of steps while allowing the smartphone's position and orientation to change dynamically, hence alleviating the mentioned shortcomings.

2. Upcoming issues

The following is the list of upcoming issues of JAISE:

– January 2019: The 10th Anniversary Issue
– March 2019: Regular Issue
– May 2019: Thematic Issue on a selected topic from Intelligent Environments'18

– July 2019: Regular Issue
– September 2019: Thematic Issue on "Wearable Computing Techniques for Smart Health"
– November 2019: Regular Issue

More information on the call for papers for future thematic issues is available on the webpage of JAISE at: http://www.iospress.nl/journal/journal-of-ambient-intelligence-and-smart-environments/