Preface

A software engineering perspective on smart applications for AmI

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1. This thematic issue

There is an old adage in Software Engineering saying “Developing a software system is always harder than initially anticipated”. Software Engineering is one of the traditional areas in computing and still the problem of creating adequate software is so complex and affected by so many parameters (market preferences, market urgency, developing team experience, etc.) that although we are building more complex software, comparatively, the software produced today does not necessarily provide final users a more satisfactory experience than some softwares did some decades ago.

The development of intelligent environments does not make this problem any easier. All the contrary, the combination of several dimensions (sensors and actuators, networks, software, interfaces and humans), each one complex in its own right, creates challenges in isolation and when finally combined with each other in a product deployed in the real world. There is a need for new methodologies which facilitate the development of these systems and specifically of methods and tools which can be used to create more reliable products.

The arrival of this Thematic Issue is then very timely and we hope it will inspire and guide our community towards a more mature approach to the creation of systems. This issue has been managed by our Guest Editors, Davy Preuveneers, Paulo Novais and Juan Manuel Corchado, to whom we are very grateful for their professional work. Its content has been influenced by papers which have been presented in a preliminary form at ISAmI’11 but there are also papers which were attracted to an open call disseminated worldwide.

Supplementing the technical material, with this issue we continue our section on Book Reviews. Egon van den Broek provides another review for this series. As usual we also include Call for papers and summaries of graduations at the level of Ph.D.

2. Upcoming issues

Following our tradition of alternating Thematic Issues with Regular Issues the July issue will be a regular one and the one to be published in September will be a Thematic Issue focused on Home based health – wellness measurement and monitoring.