

Call For Papers
Special Issue on
Ubiquitous Computing Applications: eCommerce and eBusiness
International Journal of Smart Home
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Overview

Ubiquitous computing places humans in the centre of environments saturated with computing and wireless communications capabilities, yet gracefully integrated, so that technology recedes in the background of everyday activities. Indeed, the vision of an activated world is action oriented and rather than dictate, it follows and enhances human behaviour. This vision of seamless cohabitation of the world by humans and computers was first discussed in Mark Weiser's article "The Computer for the 21st Century," where it was stated that "the most profound technologies are those that disappear. They weave themselves into the fabric of everyday life until they are indistinguishable from it." Ubiquitous computing has emerged as one of the principal technologies that could lead to the achievement of the Ambient Intelligence (Aml) vision.

The Aml world then, is a world largely defined by ubiquitous computing applications. But such applications present an altogether new set of requirements: they are developed at the many layers of the physical world, that is they may be global, environmental, spatial, personal, handheld, wearable or embedded; they may be personal or social or adapting their status depending on context; they may be made up of any of a number of components coordinated centrally or built as a distributed and decentralised architecture, autonomous or un-affiliated; they may vary on their degree of physical integration as well as their integration with existing information infrastructures; they may show spontaneous behaviour and they may learn to adapt it; they may create an ambient intelligence landscape; and last but not least they may be embedded, pervasive or mobile. Thus, from a computer science perspective many see ubiquitous computing as primarily a systems engineering problem.

Authors are invited to submit original papers that fall into one of the following categories:

- Original and unpublished research work
- Report of innovative computing applications in the arts, sciences, engineering, and business areas
- Report of successful technology transfer to new problem domains
- Report of industrial experience and demos of new innovative systems

Topics

For this special issue of the IJSH we solicit all types of UC research and applications with emphasis on those describing research that directly affects the realisation of eCommerce and eBusiness applications and systems within Aml spaces.

Possible application areas include but are not restricted to:

- Private and public Aml spaces
- UC applications that support different human activities, such as working, collaborating, learning, travelling, entertainment, etc.

- UC applications for social human activities, such as transportation, negotiation, communication, etc.
- Interaction with UC systems, including motion recognition, attention-driven interaction, natural language interaction etc.
- Tools that support synthesis, orchestration and composition of UC applications
- Ubiquitous cognitive assistance including ubiquitous valet, rememberer systems or software robots
- Ubiquitous and pervasive eCommerce including shopping assistants, retail environments and home shopping
- Adaptive context-aware services for conducting transactions and accessing digital goods or assets
- UC services and applications that support organisational knowledge maintenance and diffusion
- Emergent UC services

Schedule

Submission due date (Direct submission via Guest Editor): April 15, 2008

Notification of acceptance – (Including SAC08 selected papers): May 15, 2008

Submission of final revised paper: June 5, 2008

Publication date: 4th Quarter, 2008 (Tentative)

Submission & Review Instructions

Papers, which have appeared previously in proceedings of conferences, could be submitted to this special issue if they are substantially revised or improved from their earlier versions, due to copyright issues.

Submission method (Selected best papers of SAC08 will be omitted from the first round process);

Submissions must be directly sent via email to Guest Editors: kameas@cti.gr and g.roussos@bbk.ac.uk

Paper submissions must conform to the layout and format guidelines in the International Journal of Smart Home. Instructions for Contributors are in:

<http://www.sersc.org/journals/IJSH/>

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