Special Issue on
Multimodal Systems, Services and Interfaces for Ubiquitous Computing

Activity recognition and implicit interaction are central themes in ubiquitous computing. These environments usually encompass a variety of modalities (e.g., speech, gesture, and handwriting), collecting rich and complex information by integrating multiple devices and different kinds of sensors. In these cases, multimodal recognition achieves robust and reliable results by leveraging on different recognition mechanisms and making the best out of the characteristics of each single channel. Multimodal interaction, in turn, enables natural and implicit interaction in ubiquitous computing contexts by making available various and flexible interfaces that adapts to the environment. In the end, multimodal approaches are key to accomplish all these tasks, by overcoming single modality limitations and difficulties in recognition and interaction. Hence multimodal systems, services and interfaces are crucial ingredients for ubiquitous computing, and have attracted much interest in both industry and academia over the last decade.

This special issue aims to further scientific research within the field of multimodal interaction, services and systems for ubiquitous computing. It will accept original research papers that report latest results and advances in this area. It will also invite review articles that focus on the state-of-the-art in multimodal concepts and systems, highlighting trends and challenges. The papers will be peer reviewed and will be selected on the basis of their quality and relevance to the topic of this special issue. Topics include (but are not limited to):

- Multimodal sensing in smart environments
- Multimodal fusion techniques
- Multimodal activity recognition
- Multimodal mobility understanding
- Multimodal user modeling
- Multimodal content access and adaptation
- Intelligent user interface
- Multimodal support for social interaction
- Virtual and augmented multimodal interfaces
- Distributed and collaborative multimodal interfaces
- Architectures and tools for multimodal application development
- Applications such as smart home, healthcare, and meeting space
- Evaluation of multimodal systems and interfaces

Important Dates

Full manuscript due:	May 31, 2009
Notification of the first review process:	Aug. 15, 2009
Final acceptance notification:	Oct. 20, 2009
Final manuscript due:	Oct. 31, 2009
Publication date:	Spring 2010 (Tentative)

Submission Guidelines
Submissions should be prepared according to the author instructions available at the journal homepage, http://www.springer.com/computer/user+interfaces/journal/779. Manuscripts must be submitted in the form of PDF file to the corresponding editor Zhiwen Yu (yu@ccm.media.kyoto-u.ac.jp or zhiweny@gmail.com).

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