



ASC2008 IEEE International Workshop on Ambient Semantic Computing

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In conjunction with
IEEE International Conference on
Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC2008)



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Paper Submission

Prospective authors are invited to submit a technical paper of up to 8 pages in PDF format to hwhsiao@asia.edu.tw by the deadline of paper submission. The acknowledgement email for the receipt of the submitted papers will be sent within 2 working days. Manuscripts must be in English and should follow the IEEE Computer Society Proceedings Manuscript Formatting Guidelines. Detailed Author Kits are available at the IEEE SUTC2008 web site (<http://sutc2008.csie.ncu.edu.tw/>). Accepted papers will be published as workshop proceedings of the ASC2008 by IEEE Computer Society Press. Distinguished quality papers presented at the conference will be recommended for publications in *International Journal of Semantic Computing*.

Sponsors

This workshop is sponsored by the IEEE Computer Society, Academia Sinica, National Science Council, and Asia University.



Conference Venue

The Splendor Hotel, Taichung
1049 Chien Hsing Road, Taichung, Taiwan 403, ROC
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Call for Papers

This workshop (<http://www.csbc.asia.edu.tw/ASC2008/>) is concerned with novel methods, algorithms, and concepts which fruitfully combine ambient intelligence and semantic technologies, called ambient semantic computing.

By *ambient intelligence*, we refer to distributed, mobile, and ubiquitous computing approaches that emphasize the dawning era of networked *anytime anywhere* computers, which users wear and encounter in everyday life – without perceiving them as computers. Context-aware computing, multimodal and tangible interaction, and smart environments are examples for relevant research fields in ambient intelligence.

By *semantic technologies*, we refer to natural language processing (NLP), knowledge related research, and computer perception approaches (e.g. handwriting and speech recognition, computer vision, multimedia analysis, situation detection, etc.) that target *human understanding* of the *perceived media*. Examples of relevant NLP technologies are spoken dialogue interfaces, natural language information search, question answering and NLP-based methods in service or software search, discovery, composition or maintenance.

We are convinced that the vision of ambient intelligence, i.e. a world of omnipresent *hidden* computers that truly aid human beings can only be achieved if these computers can deal with concepts that reflect human understanding and common sense. Therefore, the *smartness* of ambient intelligence must be combined with the *naturalism* of semantic technologies.

Topics to be addressed include, but are not limited to:

- language-based and multimodal human-computer interfaces for ambient intelligence
- combinations of distributed systems and natural language processing technologies to support knowledge work
- unstructured information management methods for semantically enabled software
- next generation public security based on ambient intelligence and semantic technologies
- situational context used to improve information management and NLP context used for context-sensitive ubiquitous computing
- *natural* concepts for combining human and computer-based trust, privacy, reliability, etc.
- concepts and methods, resources and tools for the development of ambient semantic computing systems

Important Dates

Submission of abstracts: March 1, 2008
Notification of acceptance: March 7, 2008
Submission of camera-ready papers: March 28, 2008

Contact Information

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