

# The 5th International Conference on Ubiquitous Intelligence and Computing (UIC-08)

- Building Smart Worlds in Real and Cyber Spaces -

<http://www.uic-conference.org/2008/> and <http://www.iu.hio.no/uic08/>

Organized by Oslo University College and University of Stavanger, Norway

Technical Sponsorship by IEEE Task Force on Intelligent Ubiquitous Computing

Oslo, Norway, June 23-25, 2008



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See UIC-08 web site: [www.iu.hio.no/uic08/](http://www.iu.hio.no/uic08/)

Further questions, please contact with  
UIC08 Secretariat <[uic08@ux.uis.no](mailto:uic08@ux.uis.no)>

Ubiquitous computers, networks and information are paving a road towards a smart world (SW) in which computational intelligence is distributed throughout the physical environment to provide trustworthy and relevant services to people. This ubiquitous intelligence (UI) will change the computing landscape because it will enable new breeds of applications and systems to be developed; the realm of computing possibilities will be significantly extended. By embedding digital intelligence in everyday objects, our workplaces, our homes and even ourselves, many tasks and processes could be simplified, made more efficient, safer and more enjoyable. Ubiquitous computing, or pervasive computing, composes these many "smart things/u-things" to create the environments that underpin the smart world.

A smart thing can be endowed with different levels of intelligence, and may be context-aware, active, interactive, reactive, proactive, assistive, adaptive, automated, sentient, perceptual, cognitive, autonomic and/or thinking. Intelligent/smart things is an emerging research field covering many disciplines. A series of grand challenges exist to move from the world of ubiquitous computing with universal services of any means/place/time to the smart world of trustworthy services with the right means/place/time. UIC-08 is a successor of the 1st Int'l Workshop on Ubiquitous Smart Worlds (USW-05, Taipei, Mar. 2005), the 2nd Int'l Symposium on Ubiquitous Intelligence, Smart Worlds (UISW-05, Japan, Dec. 2005), the 3rd Int'l Conference on Ubiquitous Intelligence and Computing (UIC-06, Three Gorges, China, Sept. 2006) and the 4th Int'l Conference on Ubiquitous Intelligence and Computing (UIC-07, Hong Kong). It offers a forum for researchers to exchange ideas and experiences in developing intelligent/smart objects, environments, and systems as well as discuss various personal/social/physical issues faced by UI and smart worlds.

Topics include but are not limited to the following:

### 1. Ubiquitous Intelligent/Smart Objects

- \* Electronic Labels, Cards, E-Tags and RFID
- \* Embedded Chips, Sensors & Actuators
- \* MEMS, NEMS, Micro & Biometric Devices
- \* Everyday Goods, Artifacts, Robots, etc.
- \* Smart Appliances and Wearable Devices
- \* Material, Textile, Cloth, Furniture, etc.
- \* Emerging Intelligent/Smart Objects
- \* Embedded Software and Agents

### 2. Ubiquitous Intelligent/Smart Environments

- \* Room, Home, Office, Laboratory, etc.
- \* Building, Library, School, Campus, etc.
- \* Shop, Clinic, Hospital and Health Care
- \* Street, Yard, Park, Ground, City, etc.
- \* Vehicle, Road, Traffic & Transportation
- \* Land, Pool, Space and Hyperspace
- \* Learning, Sport, Entertainment, etc.
- \* Novel Intelligent/Smart Applications

### 3. Ubiquitous Intelligent/Smart Systems

- \* Sensor, Ad Hoc & Intelligent Networks
- \* Knowledge Representation and Ontology
- \* Wearable, Personal and Body Area Systems
- \* OS, Middleware and Intelligent Platforms
- \* Intelligent Service Assoc. and Architecture
- \* Massive Agents, Swarm/Amorphous Systems
- \* Context-aware and Proactive Systems
- \* Novel Intelligent/Smart Systems

### 4. Personal/Social/Physical Aspects

- \* Real/Cyber World Modeling and Semantics
- \* End-User Interface, Control & Programming
- \* Social/Natural/Physical Model of UI & SW
- \* User/Object Identity and Activity Recognition
- \* Security, Privacy, Safety and Legal Issues
- \* Emotional, Ethical and Psychological Factors
- \* Implication and Impact of UI and SW
- \* Relations between Real and Cyber Worlds

## IMPORTANT DATES

Submission Deadline:	January 19, 2008
	<del>January 05, 2008</del>
Authors Notification:	March 05, 2008
Final Manuscript Due:	April 05, 2008

Workshop under the "midnight sun" at Longyearbyen, Svalbard, Norway June 26-28.

## ELECTRONIC SUBMISSION

Prepare your paper according to the LNCS format. Submit your paper(s) in PDF-format at the UIC-08 submission site: <http://www.iu.hio.no/uic08/sub/>

## PAPER PUBLICATION

Accepted papers are planned to be published by Lecture Note in Computer Science (LNCS). Final page limit will be announced later. At least one author of each accepted paper is requested to register and present their work at the conference, otherwise the paper will be removed from the digital library after the conference.

Distinguished papers, after further revisions, will be published in special issues of the Journal of Ubiquitous Computing and Intelligence (JUCI), and the International Journal of Pervasive Computing and Communications (JPCC).