

The 8th International Conference on Ubiquitous Intelligence and Computing (UIC 2011)

- Building Smart Worlds in Real and Cyber Spaces -



<http://cse.stfx.ca/~uic2011/>

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See UIC 2011 website: <http://cse.stfx.ca/~uic2011/>

Ubiquitous sensors, devices, networks and information are paving the way towards a smart world in which computational intelligence is distributed throughout the physical environment to provide reliable and relevant services to people. This ubiquitous intelligence will change the computing landscape because it will enable new breeds of applications and systems to be developed and the realm of computing possibilities will be significantly extended. By enhancing everyday objects with intelligence, many tasks and processes could be simplified, the physical spaces where people interact like the workplaces and homes, could become more efficient, safer and more enjoyable. Ubiquitous computing, or pervasive computing, uses these many "smart things or u-things" to create smart environments, services and applications.

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. Research on ubiquitous intelligence is an emerging research field covering many disciplines. A series of grand challenges exist to move from the current level of computing services to the smart world of adaptive and intelligent services. Started in 2005, the series of UIC conferences has been held in Taipei, Nagasaki, Three Gorges (China), Hong Kong, Oslo, Brisbane, Xi'an. UIC 2011 will include a highly selective program of technical papers, accompanied by workshops, panel discussions and keynote speeches. Established as a premier venue in the area of ubiquitous intelligence and computing, UIC 2011 will offer a forum for researchers to exchange ideas and experiences in developing intelligent/smart objects, environments and systems.

The UIC 2011 topics include but are not limited to the following:

1. Ubiquitous Intelligent/Smart Systems

- * Sensor, Ad Hoc, Mesh & P2P Networks
- * Social Networking and Computing
- * Knowledge Representation and Ontology
- * Wearable, Personal and Body Area Systems
- * Middleware and Intelligent Platforms
- * Intelligent Services and Architectures
- * Agents, Swarm and Context-aware Systems
- * Nature-inspired Intelligent Systems

2. Ubiquitous Intelligent/Smart Environments

- * Smart Room, Home, Office, Laboratory
- * Smart Shop, Hospital, Campus, City, etc.
- * Smart Vehicle, Road, Traffic & Transportation
- * Healthcare and Elder/Child Care Services
- * Pervasive/Ubiquitous Media and Services
- * Pervasive Learning, Games, Entertainment
- * Other Intelligent/Smart Applications

3. Ubiquitous Intelligent/Smart Objects

- * Electronic Labels, Cards, E-Tags and RFID
- * Embedded Chips, Sensors & Actuators
- * MEMS, NEMS, Micro & Biometric Devices
- * Smart Appliances and Wearable Devices
- * Material, Textile, Cloth, Furniture, etc.
- * Embedded Software and Agents
- * Interaction to Smart Objects/Devices
- * Smart Object OS and Programming

4. Personal/Social/Physical Aspects

- * Real/Cyber World Modeling and Semantics
- * User/Object Identity and Activity Recognition
- * Adaptive User Interfaces and Tools
- * Security, Privacy, Safety and Legal Issues
- * Emotional, Ethical and Psychological Factors
- * Implication & Impact of Ubiquitous Intelligence
- * Relations between Real and Cyber Worlds

IMPORTANT DATES

Submission Deadline: May 01, 2011

Authors Notification: June 01, 2011

Final Manuscript Due: July 01, 2011

WORKSHOPS

The UIC 2011 Organizing Committee invites proposals for one-day workshops affiliated with the conference and addressing research areas related to the conference. The workshop proceedings will be published by IEEE CS Press. Submit workshop proposals to workshops chairs via emails.

PAPER SUBMISSION

Papers need to be prepared according to the LNCS format, and submitted in PDF format via the UIC 2011 submission site: <http://cse.stfx.ca/~uic2011/sub/>

PAPER PUBLICATION

Accepted conference papers are planned to be published by Lecture Notes in Computer Science (LNCS, EI indexed). At least one author of each accepted paper is required to register and present their work at the conference; otherwise the paper will not be included in the proceedings. Selected papers, after further extensions and revisions, will be published in special issues of prestigious journals on pervasive and ubiquitous computing.