

The 9th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2012)

- Building Smart Worlds in Real and Cyber Spaces -

<http://conf.kyusan-u.ac.jp/uic2012>

September 04-07, 2012, Fukuoka, Japan

Hosted by Kyushu Sangyo University, Fukuoka, Japan

Co-located with ATC 2012, ICA3PP-2012



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See the UIC 2012 website,

<http://conf.kyusan-u.ac.jp/uic2012/>

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, and Banff. UIC 2012 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 2012 will offer a forum for researchers to exchange ideas and experiences in developing intelligent/smart objects, environments and systems.

The UIC 2012 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

Paper Submission Deadline: May 15, 2012 (HARD DEADLINE)

Authors Notification: June 15, 2012

Final Manuscript Deadline: June 28, 2012

WORKSHOPS/DEMOS/EXHIBITS

The UIC 2012 Organizing Committee invites proposals for workshops and demos/exhibits affiliated with the conference and addressing research areas related to the conference. Accepted workshop/demo papers will be included in the proceedings published by IEEE CPS Press. Click the following links for submission details/deadlines. For workshop proposals, <http://conf.kyusan-u.ac.jp/uic2012/wsprop/> For demo/exhibit proposals, <http://conf.kyusan-u.ac.jp/uic2012/demoprop/>

PAPER SUBMISSION

Main conference papers need to be prepared according to the IEEE CPS format, 7 to 8 pages, and submitted in PDF format via the UIC 2012 submission site:

<http://cse.stfx.ca/~uic2012/sub/>

PAPER PUBLICATION

Accepted conference papers will be published by IEEE CPS (IEEE-DL and 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.

Best Paper Awards will be presented to high quality papers. Selected papers, after further extensions and revisions, will be published in special issues of prestigious journals (IJCS, IF=0.226; JIT, IF=0.448, JSA, IF=0.667).