Ubiquitous Intelligence for Smart Things

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, more efficient and more enjoyable. Ubiquitous computing is to create such intelligent/smart environments, services and applications.

Research on ubiquitous intelligence is an exciting field covering many disciplines. A series of grand challenges exist to move from the current computing services to the ubiquitous intelligent/smart things. UIC 2018 is the next edition of the successful series, previously held as UIC 2017 San Jose USA, UIC 2016 Toulouse France, UIC 2015 Beijing China, UIC 2014 Bali Indonesia, UIC 2013 Vietri sul Mare Italy, UIC 2012 Fukuoaka Japan, UIC 2011 Banff Canada, UIC 2010 Xi’an China, UIC 2009 Brisbane Australia, UIC 2008 Oslo Norway, UIC 2007 Hong Kong, UIC 2006 Wuhan China, UIC 2005 Nagasaki Japan, and UIC 2004 Taipei Taiwan.

The 15th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2018) will include a highly selective program of technical papers, accompanied by workshops, demos, panel discussions and keynote speeches. We welcome high quality papers that describe original and unpublished research advancing the state of the art in ubiquitous intelligence and computing. Topics for submissions include but are not limited to the following:

**Track 1: Intelligent/Smart Object & Interaction**
- AutoID technologies such as RFID or iBeacon
- Embedded Chips, Sensors, and Actuators
- MEMS, NEMS, Micro and Biometric Devices
- Printed Electronics and Pasted Circuits
- Wearable Devices & Embodied interaction
- Materials, Textiles, Fabrics, Furniture, etc.
- Embedded Software and Agents
- Interaction to Smart Objects and Devices
- Smart Object OS and Programming
- Novel Interaction Models for Smart Objects
- Self-explanatory Smart Objects

**Track 2: Intelligent/Smart System & Service**
- Sensor, Ad Hoc, and P2P Networks
- Wearable, Personal and Body Area Systems
- Smart Systems Programming Models
- Intelligent Services and Architectures
- Cognitive computing in ubiquitous systems
- Human Activity Recognition
- Adaptive/Autonomic & Context-aware Systems
- Autonomous Cars, Assistive Driving
- Big Data in Ubiquitous Systems
- Nature-inspired Intelligent Systems
- Knowledge Representation and Reasoning
- Chatbots, Cyborgs, Embodied Agents

**Track 3: Intelligent/Smart Environment & Apps**
- Urban Computing and Smart City Systems
- Smart Home, Office, Laboratory, and Factory
- Virtual Reality, Augmented Reality
- Intelligent Traffic and Transportation
- Intelligent Energy Consumption
- Intelligent Environmental Protection
- Smart Healthcare and Active Assisted Living
- Smart Education and Learning
- Pervasive Games and Entertainment
- Smart Public Safety and Security
- Virtual Personal Assistants, Cognitive Experts

**Track 4: Personalization and Social Aspects**
- Social Computing and Crowd Computing
- Mobile Crowd Sensing and Sourcing
- Affect/Emotion/Personality/Mind Computing
- Location-Based Social Networks
- Human Mobility Modeling and Mining
- Human Centered Computing
- Context-aware Computing
- Recommendation System for Ubiquitous Comp
- Human-centric Design & Sensing
- Socially Aware and Community-aware Systems
- Security, Privacy, Safety, Ethical & Legal Issues
- Smart Object-mediated Behaviour Modelling

**PAPER SUBMISSION**
Main conference papers are limited to 8 pages, following the IEEE CS format, and are to be submitted as PDF via the submission site: [https://easychair.org/conferences/?conf=uic2018](https://easychair.org/conferences/?conf=uic2018).

**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 will be recommended to special issues. More details can be found via [http://www.smart-world.org/2018/uic/](http://www.smart-world.org/2018/uic/).

**WORKSHOPS and SPECIAL SESSIONS**
The UIC 2018 Organizing Committee invites proposals for workshops and special sessions associated to the UIC. Accepted papers will be included in the proceedings published by IEEE CS Press. For submission guidelines, see [http://www.smart-world.org/2018/uic/workshop/](http://www.smart-world.org/2018/uic/workshop/).

For workshop and special session proposals, contact: ryan@waikato.ac.nz