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 2019 is the next edition of the successful series, previously held as UIC 2018 Guangzhou China, 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 Fukuoka Japan, UIC 2011 Barnfi Canada, UIC 2010 Xian 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.

The 16th IEEE International Conference on Ubiquitous Intelligence and Computing (UIC 2019) 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 We welcome high quality papers that describe original and unpublished research advancing the state of the art in ubiquitous intelligence and computing.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/Beacon
- Embedded Chips, Sensors, and Actuators
- MEMS, NEMS, Micro and Bimetic 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 Systems & Services**
- 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
- Knowledge Representation and Reasoning
- Chatbots, Cyborgs, Embodied Agents

**Track 3: Intelligent/Smart Environment & Applic.**
- 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 Systems for Ubiquitous Comp
- Human-centric Design & Sensing
- Socially Aware and Community-aware Systems
- Security, Privacy, Safety and Ethical & Legal Issues

Accepted conference papers will be published by IEEE (IEEE-DL and EI indexed) in Conference Proceedings. Best Paper Awards will be presented to high quality papers. Selected papers will be recommended to prestigious journal special issues.
