

# RTCSA / NVMSA 2018

**The 24th IEEE International Conference  
on Embedded and Real-Time Computing  
Systems and Applications / The 7th IEEE  
Non-Volatile Memory Systems and  
Applications Symposium**



## Call for Paper

### Smart City based on Ambient Intelligence

Smart City based on Ambient Intelligence (SCAI) Workshop will be held in Hakodate, Japan on Aug. 28<sup>th</sup>, 2018, in conjunction with The 24th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA). This workshop is technically co-sponsored by Keio University, Ambient Intelligence Research Center and the IEICE (Institute of Electronics, Information and Communication Engineers) technical committees on Ambient Intelligence and Sensor Networks (ASN) in Japan.

#### Scope:

“Ambient Intelligence” refers to the ambient environment containing ICTs to realize a smart city. Ambient intelligence is based on various ICT related technologies, such as sensors, networks, pervasive computing, artificial intelligence, and so on. In ambient intelligence sensing environments and obtaining data about them are essential tasks. Sensed data are locally processed and/or transmitted to the place, "Cognition" where useful information is extracted from the transmitted data. Sensing environments and transmitting the sensed data are referred to as IoT or sensor network, depending on where we talk about them. The sensed data are often referred to as big data. Based on the information extracted from the collected sensed data, ambient intelligence adaptively changes the environments and/or presenting the useful information to enhance and/or assist human activities, that is, to realize smart city.

Toward future generation, it is important to realize a smart city based on ambient intelligence. From this point of view, we plan to hold a workshop about “Smart City based on Ambient Intelligence.”

## **Topics of interest include, but are not limited to the followings:**

- Ubiquitous sensing and actuation technologies  
Space sensing, vital sensing, mobile sensing, ambient interface, device and appliance technologies, embedded software, sensing and control theory.
- Ad-hoc, mesh, and sensor networks  
MAC/routing protocols, QoS control, multi-hop and cooperative communication, security, cross layer design, energy harvesting, green wireless, communication and network theory.
- Ambient intelligence  
Sensor database, context extraction, mining, location-information technology, stream processing, privacy and security, big data, learning signal processing.
- System basement  
Large scale widening, dependability, IoT, M2M, cyber physical, operation management, autonomous distributed control.
- Interdisciplinary system applications  
Agriculture, forestry and fishery support systems, disaster prevention and mitigation system, smart space, medical and health systems, industrial support system, social infrastructure system, wide area sensing system.

## **IMPORTANT DATES:**

- Workshop papers submission deadline: **June 15<sup>th</sup>**
- Workshop papers notification of acceptance: **June 25<sup>th</sup>**
- Camera ready deadline: **July 15<sup>th</sup>**
- Workshop date: **August 28<sup>th</sup>**

## **Paper submission:**

- Submission requirements: **5-page paper ONLY**  
Papers should follow the IEEE conference template:  
[http://www.ieee.org/conferences\\_events/conferences/publishing/templates.html](http://www.ieee.org/conferences_events/conferences/publishing/templates.html)
- Web site of paper submission:  
<https://easychair.org/conferences/?conf=rtcsa2018> (Although this link looks RTCSA2018's submission page, it is actually Workshop on Smart City based on Ambient Intelligence's submission form.)

## **Contact Information:**

Kentaroh Toyoda, Keio University, Japan.  
[toyoda@ics.keio.ac.jp](mailto:toyoda@ics.keio.ac.jp)

**General Chair:** Tomoaki Ohtsuki

**Program Chair:** Fumio Teraoka

**Program Committee Members:** Hiroaki Nishi, Toru Namerikawa, Kentaroh Toyoda, Shigeki Shiokawa

**Organizers:** Tony Quek, Hiraku Okada, Issei Fujishiro