

Call for Papers

Special Section on Ubiquitous Sensor Networks

The IEICE (Institute of Electronics, Information and Communication Engineers) Transactions on Communications announces a forthcoming special section on Ubiquitous Sensor Networks to be published in **December 2007**.

In the future ubiquitous network society in which everything can connect to a network, the ubiquitous sensor network can provide not only the advancement of sensing and communication technologies, but also new services using sensed information. Therefore, it must be a promising key technology that can yield a new concept in the field of communications. The ubiquitous sensor network consists of a fusion of the academic and technological fields, including the followings: sensing, information theory, transmission and detection, networking, control theory, system theory, software, middleware, and various applications. However, a technology individually developed cannot achieve the final goals unless it brings a great advance. Thus, there are many challenges that need to be overcome in realizing ubiquitous sensor networks. Considering the objectives above, the technical committee on ubiquitous sensor networks came to start in April 2007 by integrating two technical groups on sensor networks (SN) and on ubiquitous and real-world oriented networking (URON).

The purpose of this special section is to aim at the breakthrough of the wide variety of technologies to achieve the ubiquitous sensor networks, ranging from the fundamental theories and the component technologies to the platforms and the applications. Your contribution to this special section would be greatly appreciated.

1. Scope

Suggested topics include but are not limited to the following areas concerning ubiquitous sensor networks:

- Fundamental Theories
Information theory, Communication theory, Signal processing, Control theory, Distributed information processing and control, etc.
- Component Technologies
Information fusion, Data mining, Databases, Network topology, Resource management, Protocol design, Sensor localization, RF tags, Security and privacy protection, Context-aware technology, Auto-configuration, Mobility support, etc.
- Platforms
Devices and appliances, RFID, Power-saving devices, Optimal design for low-EMI, Compact devices, System control and management, Key software technology, Middleware, Smart space, etc.
- Applications
Disaster relief, Entertainment, Environmental measurement, Automatic system control, Living support, Medical support, Context-aware applications, Position-aware applications, Real-world oriented applications, Robots, etc.

2. Submission Instructions

The deadline for submission is **March 23, 2007 (JST)**. Manuscript should be prepared according to the guideline given in the "Information for Authors". The latest version of it is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html, or you can refer its brief summary attached to IEICE Transactions. The length of the paper should not exceed 8 printed pages in principle. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for other issues (60 days) because of the tight review schedule. In this special section, only the electric submission is adopted. Prospective authors are requested to follow carefully the submission process described below.

1. Submit papers using the IEICE Web site https://review.ieice.org/regist_e.aspx. The acceptable format of the file is PDF file. Other any files, e-mail submission, and postal mail are NOT acceptable. Authors should choose the [Special-EB] Ubiquitous Sensor Networks as a "Type of Issue/Category of Transactions" on the online screen. Do not choose [Regular-EB] Communications or other special sections.
2. "Copyright Transfer and Page charge Agreement" and "Confirmation Sheet of Manuscript Registration" must be sent by postal mail to the following address. Please mark "Special section on Ubiquitous Sensor Networks" on the envelope. We cannot start the review process without them, even if we receive the manuscript.
3. Please note that editorial committee will strictly keep the deadline for paper submission.

Tomoaki Ohtsuki

Dept. of Information and Computer Science, Keio University

3-14-1 Hiyoshi, Kohoku, Yokohama, 223-8522, Japan

PHONE: +81-45-566-1538 FAX: +81-45-566-1747 E-mail: ohtsuki@ics.keio.ac.jp

3. Special Section Editorial Committee

Guest Editor-in-Chief: Haruhisa Ichikawa (NTT)

Guest Editors: Tomoaki Ohtsuki (Keio Univ.), Masayasu Yamaguchi (NTT)

Guest Associate Editors: Hideyuki Uehara (Toyohashi Univ. of Tech.), Kohtaro Ohba (AIST), Masayoshi Ohashi (KDDI), Yasutada Oohama (Tokushima Univ.), Hiraku Okada (Niigata Univ.), Hideyuki Kawashima (Keio Univ.), Narito Kurata (Kajima), Ichiro Satoh (National Institute of Informatics), Yoshito Tobe (Tokyo Denki Univ.), Kaori Fujinami (Waseda Univ.), Masaki Minami (Shibaura Institute of Tech.), Hiroyuki Morikawa (Tokyo Univ.), Takaya Yamazato (Nagoya Univ.)

**Please note that if accepted for publication, all authors, including authors of invited papers, should pay for the page charges covering partial cost of publication. Authors will receive 50 copies of the reprint.*

**At least one of the authors must be an IEICE member when the manuscript is submitted for review.*