--- Special Section on Emerging Technologies on Ambient Sensor Networks toward Future Generation ---

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Emerging Technologies on Ambient Sensor Networks toward Future Generation" in September 2015.

Sensor networks enable gathering ambient information from people, products, and sensing devices for real space. Sensing data should be processed, analyzed, and applied for enhancement or assistance for human activities, which is called ambient intelligence. Ambient sensor networks (ASNs) are the sensor networks interactively cooperating with ambient intelligence. It is expected that gentle social environments such as efficient electric power usage in smart grids and effective transportation systems will be established through the ambient sensor networks. Applied researches have been promoted in the field of technologies supporting the ambient sensor networks. Toward future generation, it is important to support such progressing technologies and promote further collaboration with other fields. From the above points of view, the special section is planned (scheduled to appear in the September 2015 issue) to publish papers on the related fields.

1. Scope

The scope of this special section includes not only information and communication research fields but also its multidisciplinary research with agriculture, forestry and fisheries industry fields, industry fields including incineration and power-generator plants, and service fields such as health-care, medical-care, and circulations because they are important and major applications for the ASNs. Possible topics include, but are not limited to:

a. Ubiquitous sensing and Actuation technologies
   Space sensing, vital sensing, mobile sensing, ambient interface, device and appliance technologies, embedded software, sensing and control theory.

b. 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.

c. Ambient intelligence
   Sensor database, context extraction, mining, location-information technology, stream processing, privacy and security, big data, learning signal processing.

d. System basement
   Large scale widening, dependability, IoT, M2M, cyber physical, operation management, autonomous distributed control.

e. 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

2. Submission Instructions

The standard number of pages is 8. The page charges are considerably higher for extra pages. Manuscripts should be prepared according to the guideline in the "Information for Authors". The latest version is available at the web site, http://www.ieice.org/eng/shiori/mokuji_cs.html. The term for revising the manuscript after acknowledgement of conditional acceptance for this special section could be shorter than that for regular issues (60 days) because of the tight review schedule.

This special section will accept papers only by electronic submission. Submit a manuscript and electronic source files (TeX/Word files, figures, authors’ photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by January 9, 2015 (JST). Authors should choose the Emerging Technologies on Ambient Sensor Networks toward Future Generation as a "Type of Section (Issue)" on the online screen. Do not choose [Regular-EB].

Contact point:
Satoshi Ohzahata
University of Electro-Communications
Tel/Fax: +81-42-443-5630, Email: asm-ss-sec@mail.ieice.org

3. Special Section Editorial Committee

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