

Call for Papers

----- Special Section on Internet Technologies to Accelerate Smart Society -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Special Section on Internet Technologies to Accelerate Smart Society" in the **January 2018** issue.

The Internet has become an important communication infrastructure. The Internet applications propose indispensable services for social activities. The Internet continues growing up and various devices such as not only PCs but also smartphones, tablets and sensors are connected to the Internet called "IoT (Internet of Things)". A huge number of devices connected to the Internet will make the Internet larger and more complex. In addition, new types of Internet applications and services have appeared such as crowd sourcing, crowd funding and FinTech (Financial Technology). The Internet has grown to be an indispensable smart society that supports our quality of life. To realize a smart society, the Internet architectures and protocols for connection between the devices have been changed to new generation like as low delay and high reliability. In addition, platform technologies have appeared such as sensing network and big data analysis to provide high-performance and flexibility. The Internet applications and services should include smart control that supports our activities using sensors and actuators. The network operations to provide stable quality of communications are important. More specifically, wide variations of cross-disciplinary studies will be required in addition to a technology such as architecture and robustness. Future studies to develop the Internet should include mutual relationship between society and technology in consideration with privacy and security. We thus call for publications (scheduled to appear in the January 2018 issue) for promoting discussion and development of the Internet architectures, protocols, management methods, and applications for accelerating smart society.

1. Scope

This special section aims at timely dissemination of research in these areas. Possible topics include, but are not limited to:

- * Architectures and protocols for Internet
 - software-defined networking, network function virtualization, information centric networking, delay tolerant networking.
 - routing and traffic control technologies for large and complex networks, e.g., M2M network, P2P network and Internet-of-Things.
 - sensor network, vehicular network, data center network.
- * Platform technologies on Internet
 - distributed computing, grid computing, cloud computing, social network, sensing network, bigdata/social data analysis platform.
 - cyber-physical system, test bed system.
- * Network management methods and operation experiences for Internet
 - QoS/QoE support mechanisms, management methods for huge devices, access control technology.
 - guidelines according to trustworthiness, quality evaluation methods, and services.
 - copyright / proprietary rights management technology.
- * New applications and services for smart society
 - smart society/smart city/smart grid applications, IoT applications, case studies of crowd sourcing/crowd funding/FinTech.
 - case studies involving implementations and experiments adapted to real environment
- * New Internet technologies in accordance with the demand of society
 - privacy preserving technologies and institutional design adapted to social.
 - security technologies for multi-domain environment, e.g., authentication, authorization and accounting mechanisms for cloud/grid computing, and intrusion detection.
 - social activities support technologies.

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 **February. 20, 2017 (JST)**. Authors should choose the **Internet Technologies to Accelerate Smart Society** as a "Journal/Section" on the online screen. Do not choose [Regular-EB].

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3. Special Section Editorial Committee

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