

----- Special Section on Information and Communication Technology for IoT/CPS in Medicine and Healthcare -----

The IEICE Transactions on Communications announces that it will publish a special section entitled "Information and Communication Technology for IoT/CPS in Medical and Healthcare" in **June 2020**.

The Internet of Things (IoT) and the Cyber Physical Systems (CPS) are rapidly expanding worldwide with the rapid development of information and communication technology (ICT). This is no exception in the medicine and healthcare. As a solution to the increase in medical costs due to the progress of aging society on a global scale, there is great expectation for innovation of medical and health care services using IoT/CPS. Furthermore, IoT/CPS specialized in the medicine and healthcare brings a new research and development paradigm. It is also a new interdisciplinary field of medicine-engineering fusion. To promptly bring the technology to practical use, it is desirable to develop basic research such as sensors, devices, big data analysis, communication networks, robotics, security, regulatory science and so on as soon as possible.

To further promote research and development in IoT/CPS toward realization of innovative medical and healthcare systems and services, the special section is planned to publish papers on the related fields.

1. Scope

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

- Medical and Healthcare IoT/CPS Enabling Technologies (wireless sensor networks, communication system, antenna and propagation, localization, remote control, etc.)
- Big Data Analytics for Medical and Healthcare IoT/CPS (data aggregation and management, machine learning, deep learning, etc.)
- Medical and Healthcare IoT/CPS Security and Personal Data Protection
- Infrastructure / Environment for Medical and Healthcare IoT/CPS to make safe for users (electromagnetic environment, power environment, electromagnetic absorption and shield)
- Medical and Healthcare IoT/CPS Service, Real Implementation, Experimentation Results
- Regulatory science for Medical and Healthcare IoT/CPS

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 (LaTeX/Word files, figures, authors' photos and biographies) via the IEICE Web site https://review.ieice.org/regist/regist_baseinfo_e.aspx by **July 16, 2019 (JST)**. Authors should choose the Information and Communication Technology for IoT/CPS in Medical and Healthcare as a "Journal/Section" on the online screen. Do not choose [Regular EB].

Contact point:

Kento Takabayashi

Okayama Prefectural University

Tel: +81-866-94-2104, E-mail: takabayashi-kento-xp@ynu.jp

3. Special Section Editorial Committee

Guest Editor-in-Chief: Eisuke Hanada (Saga Univ.)

Guest Editor: Kento Takabayashi (Okayama Prefectural Univ.)

Guest Associate Editors: Minseok Kim (Niigata Univ.), Tetsushi Ikegami (Meiji Univ.), Keita Saku (Kyushu Univ.), Masaharu Takahashi (Chiba Univ.), Takefumi Hiraguri (Nippon Inst. of Tech.), Kazuhiro Honda (Toyama Univ.), Dairoku Muramatsu (Tokyo Univ. of Science),

* Authors must agree to the "Copyright Transfer and Page Charge Agreement" via electronic submission.

* Please note that if the submitted paper is accepted, all authors, including authors of invited papers, are requested to pay for the page charges covering partial cost of publications.

* Upon accepted for publication, all authors, including authors of invited papers, should pay the page charges covering the partial cost of publication around November 2019.

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

We recommend that authors unaffiliated with IEICE apply for membership. For membership applications, please visit

<http://www.ieice.org/eng/member/OM-appli.html>

* The accepted papers will be published online soon after notification of acceptance on the web site of Transactions Online. For detailed information, please visit

http://www.ieice.org/eng/shiori/page2_cs.html#8