

CALL FOR PAPERS

IEEE Internet of Things Journal Special Issue on Internet of Things for Smart and Connected Health

Smart and connected health (SCH) is the multidisciplinary technology to provide preventive or remote treatments by utilizing digital health information structure such as body sensor networks and smart techniques such as from Data to Knowledge to Decisions. It will enable preventive care, clinic-centric to patient-centered practice by applying diverse Internet of Things (IoT) technologies in sensors, computing, networking and communication, and can allow the individuals to participate in their own care. Future SCH will be realized by providing rich medical information to each individual through replacing infrequent, clinic-based measurements with unobtrusive, continuous sensing, monitoring and assessment.

The development of SCH will play a key role in the modern society to meet the broad goals of medical applications. However, significant challenges still remain in the area. For example, lack of medical baseline data for each particular individual. The IoT technology such as continuous sensing mobile communication can be employed to create individualized baselines. The theme of the special issue (SI) is especially focused on the two major aspects of IoT for SCH: (1) monitoring and assisting individuals utilizing smart systems including sensors, devices, and robotics, (2) an interoperable digital health information infrastructure to increase medical/health information availability and use. The outputs of SCH with IoT could significantly improve a person's outcomes and quality of life. Findings from the SI will provide support for enabling IoT to move the focus from disease to health and wellbeing at the individual, system, and organizational level in many SCH applications. We encourage submissions on theoretical, practical, as well as experimental studies, from both academia and industry, related to all aspects of IoT for SCH. Topics of interests include (but are not limited to) the following categories:

- Digital Health Information Infrastructure for SCH
- Healthcare Applications of Body Area Networks
- Communication Protocols and Algorithms for SCH
- Medical Sensors, Devices and Robotics
- Privacy, Security and Trust of Medical Systems
- Computer-Aided Diagnosis
- Data To Knowledge To Decisions for SCH
- Data Visualization and Intelligent Integration for Decision-Making
- Mobile Social Sensing for Wireless Health
- Bioimaging
- Integrated Systems for Telemedicine
- Clinical Practice and Technology Development
- Cloud-Assisted Medical Cyber-Physical Systems
- Body Area Networks for Sports Applications and Systems
- Mobile Computing for Smart Health and Well Being
- Nano-Scale Communications and Networking for SCH
- Smart Health and Big Data
- Effectiveness, Efficiency, and Robustness of Healthcare Systems

Important Dates

Submissions Deadline: **May 31th, 2014**

Revision Due: November 15th, 2014

Final Manuscript Due: December 31th, 2014

First Reviews Due: September 30th, 2014

Second Reviews Due/Notification: December 15th, 2014

Publication Date: February, 2015

Submission

The special issue seeks submission of papers that present novel original results and findings on IoT for smart and connected health. Solicited original submissions must not be currently under consideration for publication in other venues. Author guidelines and submission information can be found at <http://iot.ieee.org/journal>. All manuscripts should be submitted through Manuscript Central: <http://mc.manuscriptcentral.com/iot>.

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