Special Issue on Towards Ubiquitous Computing based on Smart Internet of Medical Things

Aim & Scope

International Journal of Space-Based and Situated Computing (IJSSC) is soliciting papers for the special issue on Towards Ubiquitous Computing based on Smart Internet of Medical Things. The Internet of Medical Things (IoMT) is an extension and specialization of that original Internet of Things(IoT) concept, and applies to the interconnectedness of devices, software applications, and data which are specific to the medical industry. IoMT can add smart technologies to medical devices to monitor the progression of a disease away from the doctor's office and learn things that could impact future care guidelines and patients. It can also provide a better way to care for our elderly by tracking vitals and heart performance, glucose and other body systems, and activity and sleeping levels. During outbreak of pandemic(e.g. COVID-19), IoMT can even be used to detect main symptoms ubiquitously using intelligent sensors and trace the origin of outbreak based on aggregated IoT data (e.g., geographic mobile data, purchase history). Research on Affective computing has defined a framework to recognize, interpret and process human affects, but more research is needed to investigate its application to biomedical applications, especially "in the wild" and over extended periods of time. This special issue aims to create a platform for researchers, developers and practitioners from both academia and industry to disseminate the state-of-the-art results and to advance the ubiquitous computing in IoMT.

The areas of interests include, but are not limited to:

- IoMT for disease detection, contact tracing and monitoring
- Wearable sensor and device for IoMT
- Multimodal data pre-processing technique for IoMT
- User personalization with IoMT
- Mobile, tangible and virtual/augmented affective interface for IoMT
- Hybrid human and machine intelligence in IoMT
- Affective databases and annotation tools for IoMT
- Security, privacy, integrity of multimodal data in IoMT
- Human-centred interaction design for IoMT
- Ethical issues in IoMT

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Submission Deadline

30 April 2021