International Journal of Distributed Sensor Networks

Special Issue on
Mobile Sensing and Data Management for Sensor Networks 2014

Call for Papers

With the rapid advent of the Internet of Things, sensor cloud, mobile Internet, and Web 3.0, more and more mobile devices, such as smart phones, Google glasses, and RFID, plus deployed various sensor networks, can sense and collect sensory data anytime and anywhere. We are moving toward the era of worldwide sensor networks, in which a huge amount of heterogeneous sensory data will be created every day and require advanced data management. Efficiently gathering, sharing, and integrating these spatial temporal data and then deriving valuable knowledge timely are a big challenge in this context. Furthermore, in the environment of mobile environment, data management means a collection of centralized and distributed algorithms, architectures, and systems to store, process, and analyze the immense amount of spatial temporal data, where these data are cooperatively gathered through collections of mobile sensing devices which move in space over time. In this special issue, we are interested in inviting and gathering recent advanced data management techniques. Authors are invited to submit complete unpublished papers, which are not under review in any other journal. The topics suggested can be discussed in terms of concepts, states of the art, standards, designs, implementations, and running experiments or applications. Potential topics include, but are not limited to:

- Sensory data sharing
- Query processing in sensor networks
- Data gathering in mobile sensor networks or energy harvesting based sensor networks
- Data heterogeneity in mobile environment
- Data duplication and replication issues in mobile environment
- Searching, discovering, and locating things and services in mobile environment
- Security with data management
- Sensory data caching and storing for wireless multimedia sensor networks
- Big sensor data management
- Data mining in big sensor data
- Machine learning applied to sensor data
- Energy efficiency and other resource tradeoffs with sensing systems
- Participatory and opportunistic sensing
- Applications
- Mobile service modeling and management
- Mobile-sensor-based personal informatics
- Mobile sensing deployment experiences and users studies
- Social and people-centric sensor data networking using smartphones
- Sensor design for data management
- Managing and mining sensor data in cloud computing
- Managing and mining sensor data in social networking

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Manuscript Due	Friday, 25 April 2014
First Round of Reviews	Friday, 7 July 2014
Publication Date	Friday, 12 September 2014

Lead Guest Editor

Jianwei Niu, School of Computer Science and Engineering, Beihang University, Beijing 100191, China; niujianwei@buaa.edu.cn

Guest Editors

Lei Shu, Guangdong University of Petrochemical Technology, China; lei.shu@live.ie

Zhangbing Zhou, School of Information Engineering, China University of Geosciences, Beijing 100083, China; zhangbing.zhou@gmail.com

Yan Zhang, Simula Research Laboratory, University of Oslo, Oslo, Norway; yanzhang@simula.no