

## Special issue on: "Advanced Data Management for Sensor Networks"

### In International Journal of Sensor Networks

#### *Guest Editors:*

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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 Authors are invited to submit complete unpublished papers, which are not under review in any other journal.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.

Some selected papers presented at the 2013 IEEE International Conference on Cyber, Physical and Social Computing (CPScom 2013) will be considered to be published at this issue after a peer review, but we also strongly encourage researchers unable to participate in the conference to submit articles for this call.

#### Subject Coverage

Suitable 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 trade-offs with sensing systems
- Participatory and opportunistic sensing
- Applications
- Mobile-sensor-based personal informatics
- Mobile sensing deployment experiences and users studies
- Social and people-centric sensor data networking
- Data processing and management in industrial sensor networks

## Notes for Prospective Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper was not originally copyrighted and if it has been completely re-written).

All papers are refereed through a peer review process. A guide for authors, sample copies and other relevant information for submitting papers are available on the [Author Guidelines](#) page.

## Important Dates

Manuscript due: *31 September, 2013*

Acceptance/rejection notification: *31 Jan., 2014*

Final manuscript due: *31 Feb., 2014*

## Editors and Notes

**All papers must be submitted online.** To submit a paper, please read our information on [preparing and submitting articles](#). If you experience any problems submitting your paper online, please contact [submissions@inderscience.com](mailto:submissions@inderscience.com), describing the exact problem you experience. Please include in your submission the title of the Special Issue, the title of the Journal and the names of the Guest Editors.

In addition, authors should send one copy of the article along with an abstract (maximum 200 words) via email to the corresponding Guest Editor, Prof. Jianwei Niu ([niujianwei2008@gmail.com](mailto:niujianwei2008@gmail.com)).