International Journal of Distributed Sensor Networks

Special Issue on

Big Data Analytics and Fusion for Sensor Networks

CALL FOR PAPERS

Big data analysis refers to the use of predictive analytics or other advanced methods to extract knowledge or information from data. Data fusion is the process of integrating multiple data and knowledge sources representing the same real-world object into a consistent, accurate, and useful representation. Datasets grow in size in part because they are increasingly being gathered by cheap and numerous information-sensing mobile devices, visual sensors (camera), audio sensors (microphone), and wireless sensor networks. With the rapid development of computing and sensing technologies, such as ubiquitous wireless sensor networks, the amount of data from dissimilar sensors and social media has increased tremendously. Conventional data fusion algorithms such as registration, association, and fusion are not effective for massive datasets. New research opportunities and challenges for content analysis on sensor networks have arisen.

We invite authors to submit original research and review articles that explore technologies and applications of both big data analysis and data fusion for sensor networks. We are particularly interested in articles describing the big data modeling methods, computing algorithms, and data fusion technologies; advances in applications of big data for sensors and sensor networks; and new insights and current concepts in big data analysis.

Potential topics include, but are not limited to:

- Theoretical models for big data fusion
- Distributed processing for data sensor data in sensor networks
- Approximate reasoning and pattern recognition for sensor networks
- Big data in mobile networking
- Big data analytics for social media-sensor data integration
- Big data platforms for efficient integration with sensor networks
- Virtualized and cloud-oriented resources for big data processing for sensor networks
- Big data sensor network system design
- Big data optimization in sensor networks
- Big data computing software systems
- Big data machine learning algorithms for sensor networks
- Big data security and privacy in sensor networks
- Sensor fusion algorithms for big data
- Sensor signal processing for big data sensor fusion
- Big data for pattern of life analysis and predictive analytics
- Visual big data analytics on sensor networks
- Machine learning for sensor networks

Authors can submit their manuscripts via the Manuscript Tracking System at http://mts.hindawi.com/submit/journals/ijdsn/bdaf/.

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