Call for Papers

Special Column on Smart Cities andUrban Computing

1. Overview

A smart city uses digital technologies or information and communication technologies (ICT) to enhance quality and performance of urban services, to reduce costs and resource consumption, and to engage more effectively and actively with its citizens.The soul technologyadopted by asmart city is urban computing. Urban computing is a process of acquisition, integration, and analysis of big and heterogeneous data generated by a diversity of sources in urban spaces, such as sensors, devices, vehicles, buildings, and human, to tackle the major issues that cities face, e.g. air pollution, increased energy consumption and traffic congestion.Nowadays, sensing technologies and large-scale computing infrastructures have produced a variety of big data in urban spaces, e.g. human mobility, air quality, traffic patterns, and geographical data. The big data contain rich knowledge about a city and create a huge possibilityfor urban computing and smart cities.

This special channel intends to bring together researchers to report their latest progress and exchange experience inbig data driven urban computing and smart city research achievements. For city technology development in the age of Big Data, this special channeldevote torecord the most valuabletechnical advance ofindustry and academic communitiesin its time.

2. Topics of Interests

Topics of interest include, but not limited to, the following aspects:

- Urban informatics: acquisition, aggregation, and analysis of big data
- City-wide traffic modeling, visualization, analysis, and prediction
- City-wide human mobility modeling, visualization, and understanding
- Urban computing for urban planning and city configuration evaluation
- Urban environment/pollution/energy consumption monitoring and data analysis
- City-wide intelligent transportation systems
- Anomaly detection and event discovery in urban data
- Social behavior modeling, understanding, and patterns mining in urban spaces
- Mining public transportation data, such as ticketing data in bus and subway systems, road pricing data, and taxi data

- Understanding urban economy based on big data
- Enhancing public safety and security using big data
- Data driven smart recommendations in urban spaces
- Mining data from the Internet of Things in urban areas

3. Submission Guidelines:

- **Submissions will be evaluated in batches on a "first-come-first-served" basis. Review results will be notified afterward.**

The submitted papers will be evaluated based on their originality, presentation, relevance and contributions, as well as their suitability to the special channel. The submitted papers must be written in English and describe original work that has not been published nor currently under review by any journals and conferences. Previously published conference papers should be clearly identified by the authors at the submission stage and a summary of changes should be provided about how such papers have been significantly changed and extended to be considered for this special issue. Papers that either lack originality, clarity in presentation or fall outside the scope of the special issue will be rejected without reviews.

Submissions need to conform to the layout, format limits in FCS. The submitted papers will be reviewed by at least three independent reviewers. Final decisions will be approved by the journal editors. Manuscripts need to be prepared for publication according to the journal's Author Guidelines available at FCS.

Submission Website: http://mc.manuscriptcentral.com/hepfcs

Please select "Smart Cities and Urban Computing" tag when you submit your paper, and indicate "Submission to Special Channel on Smart Cities and Urban Computing" in the cover letter.

4. Guest Editors

- Yu Zheng, Lead Researcher, Microsoft Research, China;
- Zhang Xiong, Professor, Beihang University, China;
- Bin Guo, Professor, Northwestern Polytechnical University, China;
- Jingyuan Wang, Assistant Professor, Beihang University, China.

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