CALL FOR PAPERS – IEEE Transactions on Intelligent Transportations Systems

Special Issue on Social Transportation

The ubiquity of mobile communication devices and the prosperity of location-based services are turning people and devices into ubiquitous social sensors for transportation. People experiencing traffic events can publish social media on transportation in real time, such as microblogs, images and videos. Various sensors equipped in mobile devices can uninterruptedly sense vast clues on urban dynamics. However, designing approaches and tools to leverage comprehensive social media and sensed data to enable intelligent transportations brings a unique set of research and engineering challenges. Social transportation (ST) is the study of how these changing research and engineering challenges lead to new explorations into intelligent transportation systems. Social transportation is the science and technology of data-driven, real-time, and situation-aware transportation foundation facilitated within a crowd sourcing context. Social transportation extends intelligent transportation to the cyber-physical-social system context and aims to empower traffic and transportation systems with insights and decisions derived from real-time social and physical data. Compared with traditional sensor-based transportation systems, social transportation emphasizes real-time computing and embedded applications in transportation systems with online and interactive big data at faster speed and lower cost.

The special issue on “Social Transportation” of IEEE Transactions on Intelligent Transportation Systems aims to address issues related to the representation, computing, communication, control, analysis and applications of social transportation in traffic and transportation systems. We solicit papers describing framework, theories, approaches, and techniques of social transportation, and design, development, and applications of social transportation systems. The topics include, but are not limited to:

- fundamental issues of social transportation theories and approaches, like crowd sensing, natural language processing, data mining, visualization, and web-based agent technology;
- real experiences with designing, building, deploying and evaluating social transportation systems, like location based services (LBS), decision-based services (DBS), and intelligence-based services (IBS);
- real-world applications describing cases of social transportation, and useful knowledge for solving traffic problems or improving the transportation performance.

Important Dates

The tentative schedule for the Special Issue is as follows:

- First submission deadline: Mar 31st, 2015.
- Notification of first decision: May 31st 2015.
- First revision submission deadline: July 31st 2015.
- Notification of final decision: Nov 20th 2015.
- Final manuscript (camera ready) submission deadline: Dec 31st 2015
- Issue of Publication: Feb 2016

Manuscripts must be submitted electronically at http://mc.manuscriptcentral.com/t-its

Guest Editors

Jianping Cao (caojianping@nudt.edu.cn), National University of Defense Technology, CHINA
C. L. Philip Chen (Philip.chen@ieee.org), University of Macau, CHINA
Wei Chen (chenwei@cad.zju.edu.cn), Zhejiang University, CHINA
Zhiming Ding (zmding@bjut.edu.cn), Beijing University of Technology, CHINA
Gang Pan (gpan@zju.edu.cn), Zhejiang University, CHINA
Pu Wang (wangpu@csu.edu.cn), Central South University, CHINA