

Special Issue for International Journal on Transportation Science and Technology (IJTST)

Emerging Trend in Using Smartphone Technology for Transportation Research

Guest Editor: Yi-Chang Chiu, Associate Professor, University of Arizona

Mobile devices like smartphones are becoming an emerging personal communication and computing technology used by hundreds of millions of users world-wide. The wide ranges of new online services for smartphone utilizing both cellular phone and global positioning system (GPS) data have revolutionized not only the way people communicate and interact, but also how individuals receive and disseminate temporal and spatial information.

Recognizing the research opportunities brought forth by the GPS-enabled smartphones, this special issue is aimed at encouraging the publication of innovative research that exploits the full potential of the smartphone technology for transportation research. The areas of interest are broad, including but not limited to the following topics. Submitted papers are encouraged to discuss the concepts, design principles, and implementations of the smartphone technology for certain applications, as well as the analysis of data collected or information disseminated through the smartphone technology.

1. Methods or systems that use smartphones as part of travel decision/traffic data collection approach. The authors are encouraged to describe the concept and design of the data collection mechanism and the analysis of the collected data. Data management including privacy issues is also of interest.
2. Use smartphones as part of a method, system, or technology for real-time traffic data dissemination or route guidance/navigation, or offline traffic data analysis.
3. Use smartphones as part of a method, system or technology for location-based transportation services.
4. Use of smartphone as part of a method, system or technology for special events or man-made or natural disaster management.
5. Use of smartphone as part of a method, system or technology for spatial/temporal analysis as related to various transportation modes such as auto, transit, air, maritime, and non-motorized modes.

Interested authors please submit the manuscript to IJTST through ijtst@multi-science.co.uk and cc chiu@email.arizona.edu before December 31, 2011 and specify in the cover letter that the submitted manuscript is in response to this special issue call for paper. The review process will start immediately after the submission deadline and the accepted papers are expected to be published in the fourth 2012 issue. Further inquiry regarding this call for paper can be directed to the guest editor Prof. Chiu.

International Journal on Transportation Science and Technology is a new transportation journal focusing on promoting innovative high-quality multidisciplinary research in transportation science and technology. For more information about the journal please visit the journal website at:

<http://www.multi-science.co.uk/ijtst.htm>