

Title: Wireless Communications and Networking Technology towards Intelligent Internet of Vehicles

Overview:

Internet of Vehicles (IoV) refers to dynamic mobile communication systems that communicate between vehicles and public networks using vehicle-to-vehicle (V2V), vehicle-to-road (V2R), vehicle-to-human (V2H) and vehicle-to-sensor (V2S) interactions. It enables information sharing and the gathering of information on vehicles, roads and their surrounds. Moreover, it features the processing, computing, sharing and secure release of information onto information platforms. Based on this data, the system can effectively guide and supervise vehicles, and provide abundant multimedia and mobile Internet application services.

The next generation IoV is an emerging field that crosses multiple disciplines including automotive, intelligent transportation, information technology, communications, energy, etc. In the recent years, there are more and more communication and networking technologies and intelligence being used to make transportation more clean, efficient, connected and safe. Given that transportation represents one seventh of the world's economy, the IoV will play as an important part of the wisdom city in the future.

This special issue aims to foster the dissemination of high quality research in communication and networking technologies for enabling Internet of Vehicles. Original research articles are solicited in all aspects, including wireless communications, vehicular networking, mobile Internet, vehicle behavior model, environment awareness, autonomous vehicles and system, telematics, swarm intelligent computing systems, social economics systems, new communication systems, and experimental prototypes or tools realizing IoV.

Topics of interest at communication and networking level include, but are not limited to:

1. Wireless communication and systems for IoV

Issues concerning techniques and methods that implement wireless communication and systems been applied in client systems, connection system, and cloud systems for IoV are concentrated. Examples include intelligent sensor, ubiquitous communications, heterogeneous networks, real-time systems, intelligent transportation, mobile Internet, big data / information processing, B3G/4G systems, cognitive radio and software defined networking, etc. for IoV

2. Network technologies for IoV

Issues concerning architectures, interoperability, modeling, analysis, development tools and environments that prompt the network technologies are concentrated. Examples include wireless and mobile networking, ad hoc, sensor networking, wireless network security, QoS, reliability, performance modeling, multimedia in wireless networks, etc. to prompt the growth of the IoV.

3. Services and applications of IoV

Practical and real-world experiences that demonstrate the value of incorporating systems intelligence over the transportation/mobility are concentrated. Examples include emerging wireless/mobile applications, context and location-aware wireless services, SIP based services, RFID, sensor-based applications, security systems, etc.

Papers should address the specific topics of this special issue from the communication and networking perspective in order to be considered for the WCN Journal.

Plan for advertising the CFP:

The Guest Editors have wide and recognized experience in leading International Conferences and organizing Special Issues of International Journals. So, they can rapidly and easily disseminate the Special Issue call for papers among a number of well-esteemed colleagues and major mailing lists. In addition, the call for papers will be distributed at all the conferences attended by the Guest Editors in the next months, as well as advertised in different academic- and industry-oriented Web sites.

Schedule: (Tentative)

Paper submission deadline:	Aug. 30, 2014
Notification of the first review:	Nov. 25, 2014
Revised paper submission:	Dec. 31, 2014
Notification of the re-review:	Jan. 31, 2015
Minor revision deadline:	Feb. 15, 2015
Final notification:	Mar. 31, 2015
Final manuscript:	Apr. 15, 2015
Expected publication:	late 2015

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