

Call for Papers

IEEE Transactions on Vehicular Technology: Special Section on Vehicular Network and Communication System – From Laboratory into Reality

Scope

Wireless vehicular communications has been identified as a key technology for increasing road safety and transport efficiency, and providing Internet access on the move to ensure wireless ubiquitous connectivity. It is clear that vehicular communication and networking will be the cornerstones of the future cyber-physical system which will significantly change our daily lives.

The great potential of this technology has been acknowledged with the establishment of ambitious research programs on vehicular communication systems worldwide, such as European eSafety framework, various US V2V/V2I projects, and the Japanese Smartway and Advanced Safety Vehicle programs. Vehicular communication and networking also present an active field of standardization activities worldwide, such as ISO TC204, IEEE (802.11p and 1609.x) and SAE DSRC in the US, ETSI TC ITS and CEN WG278 in Europe and ARIB T-75 in Japan. In the past decades, the vehicular communication and networking technology has grown into maturity, moving from laboratory into reality.

This Special Section of IEEE Transaction of Vehicular Technology will mainly focus on the system aspects of vehicular communication and network system using a variety of wireless communication techniques (from short-range DSRC/WiFi to long-range cellular communication). The topics not only cover the design and analysis of vehicular communication systems and applications, but also include the practical implementation of such empirical systems and their real-world deployment/measurement results.

Topic of Interests

- Channel measurement/modeling and PHY-layer mechanisms
- Medium access control protocols
- Network protocol design and network management
- Networking to reduce energy consumption
- Vehicular system architecture and design
- Safety and non-safety applications
- Systems that reduce driver distraction
- Simulation frameworks
- Congestion control and scalability issues
- Multi-channel organization and operation
- Security and privacy issues
- Wireless in-car networks
- Vehicle-to-vehicle/roadside/Internet communication
- Telematics applications
- DSRC systems for vulnerable road users
- Field operational testing

Submission Instruction

Authors should follow the IEEE TVT manuscript format and submission procedure which can be found at the IEEE TVT home page <http://transactions.vtsociety.org/> under Information for Authors. We recommend a length of 20 pages (in the TVT submission format or 8 pages in final publication format) for regular papers submitted to this special section and will give papers of this length full consideration. Authors who need more space can submit papers up to 35 pages as TVT policy allows. Note, however, that extra page charges will apply (see TVT website for details). Prospective authors should submit a PDF version of their complete manuscript via the journal online paper submission system at <http://mc.manuscriptcentral.com/tvt-ieee>

Important Dates

Manuscript Due: ~~September 15, 2012~~ **September 29, 2012**
First Editorial Decision: December 1, 2012
Revised Manuscript Due: January 15, 2013
Final Editorial Decision: March 1, 2013
Final Manuscripts Due: April 1, 2013
Publication: Fall 2013

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