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Journal of Information Science and Engineering

Special Issue on Vehicular Wireless Networks and Vehicular Intelligent Transportation Systems

Aim & Scope

With the rapid development of wireless technologies, the Vehicular Wireless Networks (V-Winet) and Vehicular Intelligent Transportation Systems (V-ITS) have recently received much attention. V-Winets and V-ITS aim to ensure traffic safety for drivers, provide comfort for passengers and reduce transportation time and fuel consumption with many potential applications. For instance, vehicular safety applications include automatic collision notification, heavy fog detection and notification, remote diagnostics, emergency management, and other assistances for safe driving. Non-safety applications include real-time traffic congestion notification, location-based driver information services, high-speed tolling, vehicle tracking, automobile high speed Internet access, in-place traffic view, and many others. To facilitate these applications, many different types of communications and networking would be involved, including intra-vehicle, vehicle-to-vehicle (V-to-V), vehicle-to-roadside (V-to-R) and vehicle-to-infrastructure (V-to-I) communications for V-Winet and V-ITS to provide timely information or Internet access to vehicles, drivers, and passengers. Consequently, V-Winet and V-ITS need to integrate existing networking technologies, such as IEEE 802.11a, IEEE 802.11p, DSRC, 3G, IEEE 802.16, Bluetooth, Sensor networks, and ZigBee for easy, accurate, effective and simple communications among vehicles, users, and infrastructure networks.

This special issue aims to foster the dissemination of high-quality, original, unpublished research covering all aspects of V-Winet and V-ITS communications, networking, and applications. Topics of interest include, but not limited to, the followings:

- Network Architecture of V-Winet/V-ITS
- V-Winet/V-ITS Services and Applications
- Cooperative Aspects of V-Winet/V-ITS
- Availability and Scalability Issues in V-Winet/V-ITS
- Mobility, Traffic Models and Network Management for V-Winet/V-ITS
- Cross-layer Optimization Techniques for V-Winet/V-ITS
- Modulation, Coding, and Channel Modeling for V-Winet/V-ITS
- Vehicle-to-Vehicle Communication Protocols
- Vehicle-to-Roadside Communication Protocols
- Vehicle-to-Infrastructure Communication Protocols
- Simulation Framework and Real-World Testbeds for V-Winet/V-ITS
- Driving Safety and Related Applications and Services
- Green Technologies and V-Winet/V-ITS

Submission Guidelines

Prospective authors are invited to submit research contributions representing original, previously unpublished work. Submitted papers will be carefully evaluated based on originality, significance, technical soundness, and clarity of exposition. Authors should follow the JISE (<http://www.iis.sinica.edu.tw/>) manuscript format as described in the Instruction to Authors. Manuscripts (pdf and source files) must be directly emailed to the Guest Editors, **Chih-Yung Chang**, cychang@mail.tku.edu.tw, or **Yu-Chee Tseng**, yctseng@cs.nctu.edu.tw, with clear indication that submission is for the Special Issue on Vehicular Wireless Networks and Vehicular Intelligent Transportation Systems, Journal of Information Science and Engineering. All manuscripts should include a title page containing the title of the paper, full names and affiliations, complete postal and electronic addresses, phone and fax numbers, an abstract, and some keywords. The contacting author should be clearly identified.

Important Dates

Paper Submission Deadline:	March 30, 2009
Acceptance Notification:	July 31, 2009
Final Manuscript Due:	August 31, 2009
Publication Date:	May, 2010 (Tentative)

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