Special Issue on
Critical Applications in Vehicular Ad Hoc/Sensor Networks

Theme and Scope

For the past few decades, Vehicular ad Hoc Networks (VANETs) have emerged as a key technology serving community of peoples in various applications. During this era, there has been a tremendous growth in this field with many new techniques and standards have been developed for the ease and safety of the passengers. Now, the passengers during travelling can take smart decisions by knowing the outside environment variables such as traffic conditions, density of the vehicles in a particular region, duration of traffic lights in a particular areas, etc. Moreover, these passengers can download and upload the heavy contents while travelling with the aid of the already deployed Road Side Unit (RSUs) which are connected to Internet to provide various services to the end users.

Modern Vehicles equipped with sensor nodes monitor and collect the data in sparse and dense regions which can be processed for the benefit of community of peoples, e.g., health monitoring and diagnostic systems, safety alarms, intelligent transport systems, and environment monitoring. The vehicles during movement, equipped with sensor nodes, can also collect the data from human body and that data can be processed in collaboration with the other vehicles for various medical purposes. In this case, VANETs can also be used in Body Sensor Networks (BSNs).

However, as a new technology emerges, it throws new challenges to the research community. Although there exist many solutions of different kinds in the relevant areas, there is still a requirement of more efficient solutions which can be used in wide variety of applications. Many industrial and academic institutions have already geared up to provide solutions for the benefits of the community. Moreover, there are many constraints that have to be resolved before providing any standard solution. Some examples of the constraints are; mobility of the nodes, connectivity in sparse and dense regions, failure of nodes, network traffic congestion and interference, etc.

Submission is solicited from researchers across the globe in the following issues (*but not limited to these*):

- Efficient route selection in sparse and dense regions in presence of mobility of the nodes
- Optimized cluster selection on the road
- Optimized access point deployment for better coverage and uninterrupted services to all the vehicles on the road
- Security during the data dissemination
- Cache management for peer to peer (P2P) information sharing
- Load balancing in VANET/Sensor networks
- Optimized Service selection and resource discovery
- Providing QoS to various services
- Solutions to various critical applications such as health monitoring system, safety alarms etc.
- Channel allocation and selection in VANETs

Submission Guidelines

Authors can see manuscript preparation guideline here:
http://www.springer.com/business+%26+management/business+information+systems/journal/11235

Authors are required to submit papers as an all-in-one PDF file to any of the Guest Editors (CC to all is preferred). Please note in the subject line of the email, "SI_VSN_2012".

Papers would be judged by the expert reviewers based on the originality, methodology, novelty, and new innovations. Papers submitted for this special issue must not be submitted or are under consideration for publication anywhere. Papers presented in conferences should be substantially enhanced for consideration (more than 30% new contents) and should be declared at the time of submission. The conference version also must be attached along with the main manuscript.

Important Dates

Paper Submission Due: 20 December, 2012
Notification of Acceptance/Revision/Rejection: 20 April 2013
Revised paper Submission: 15 June 2013
Final Paper Submission: 15 August 2013
Publication Date: TBA

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