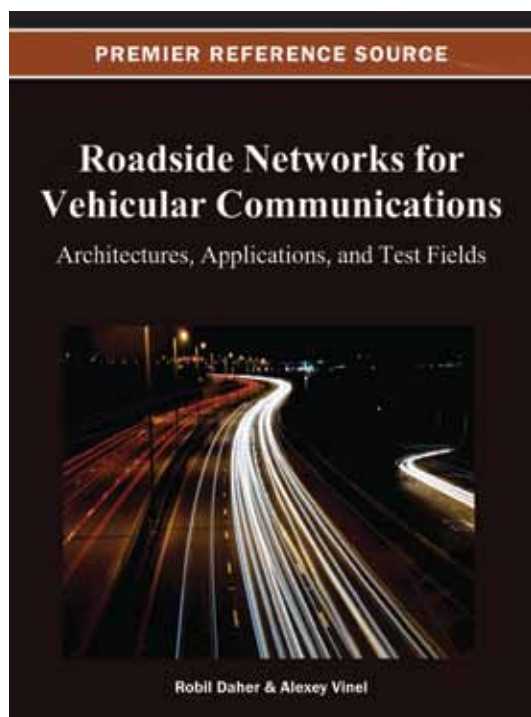


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Roadside Networks for Vehicular Communications: Architectures, Applications, and Test Fields



Robil Daher (Rostock University, Germany) and
Alexey Vinel (Tampere University of Technology, Finland)

Vehicular Communication Networks (VCNs) is a technology aim for improving traffic safety and efficiency in different road systems and networks. VCNs offer an efficient communication platform for intelligent transportation systems and related services, as well as multimedia and data services.

Roadside Networks for Vehicular Communications: Architectures, Applications, and Test Fields attempts to close the gap between science and technology in the field of roadside backbones for VCNs. This collection will be useful not only for researchers and engineers at universities, but for students in the fields of wireless communication networks, especially vehicular communication networks, and backbone networks as well.

Topics Covered:

- Real-Time Applications
- Roadside Backbone Networks
- Roadside Networks
- RSU Deployment
- Vehicular Ad Hoc Networks
- Vehicular Communication Networks
- Vehicular Sensor Networks

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Robil Daher is a scientific assistant at the Chair of Computer Architecture at the University of Rostock (Germany). He received his B.Sc. degree in Electronic Engineering from Tishreen University (Syria) in 1996, and his Ph.D. from Rostock University in 2007 in the field of load balancing and QoS for wireless networks. In 1997 he is awarded certificate and prize by Ministry of Higher Education (Syria) for excellent achievements and also for being the best student among the graduates. His research interests include vehicular communication networks, wireless ad hoc networks, heterogeneous wireless networks, resource and mobility management, QoS and load balancing, and routing protocols. He is also interested in inter-planetary communication networks and bionic-inspired solutions for performance enhancement of wireless networks. He is organiser of several workshops and author/co-author of several scientific publications. He is member of several scientific organizations and has recently established the community "Routing Lexicon" for studying and classification of routing mechanisms and protocols of different technologies. He is the head of the workgroup wireless networks at the Chair of Computer Architecture and currently works as a team manager in the project Wi-Roads (Wireless Infrastructure Networks for high-speed Roads). Additionally, He currently works on his next book "theory of load distribution".



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