

1. Record Nr.	UNINA9910438053703321
Autore	Hasan Syed Faraz
Titolo	Intelligent transport systems : 802.11-based roadside-to-vehicle communications // Syed Faraz Hasan, Nazmul Siddique, Shyam Chakraborty
Pubbl/distr/stampa	New York, NY, : Springer, 2012, c2013
ISBN	1-283-62249-1 9786613934949 1-4614-3272-3
Descrizione fisica	1 online resource (156 p.)
Altri autori (Persone)	SiddiqueN. H ChakrabortyShyam
Disciplina	388.312 629.277
Soggetti	Intelligent transportation systems Telematics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Vehicular Communication: Issues and Standards -- Evaluation of WLAN Parameters in Vehicular Setup -- Markov Model for R2V Communications -- Measuring Disruption in R2V Communications -- Inter ISP Roaming for Vehicular Communications -- Handover Latency: Evaluation and Reduction -- Future Directions and Research Ideas.
Sommario/riassunto	Focusing on the nuts and bolts of wireless network access for computers on-board vehicles, this volume shows how in-car computerization now does much more than merely act as a glorified map-reader. Wireless communication is transforming road travel in ways previously undreamt of, allowing vehicles to "talk" to a wider network and monitor road conditions, potential delays and traffic congestion, all automatically. Toll payments can be made without opening the driver's window on a cold day, while vehicles might themselves take active steps to avoid collisions. It is the connection between on-board computers and wireless access points, ubiquitous in most cities now, that is a key area of research. Moving vehicles transfer

their communications to new points as they progress, and this causes delays, known as “handover latency.” In this book, new stochastic models are developed to map the disruption when connecting to 802.11 WLAN points. It details the application of stochastic tools to analyzing communication networks, as well as previous literature on handover latency and relevant mathematical modeling. Finally, it presents a scheme for monitoring traffic congestion using WLAN connectivity. This volume will be a useful addition to the libraries both of wireless communication students and those studying probability theory.
