

Vehicular Networking: Applications, Standards, Protocols, Deployment Plans and Open Issues

Instructors

Onur Altintas, Toyota Info Technology Center

Falko Dressler, University of Innsbruck, Austria

Abstract

Vehicular networking serves as one of the most important enabling technologies required to implement a myriad of applications related to vehicles, vehicle traffic, drivers, passengers and pedestrians. Much progress has been achieved in this area during the past decade. In this tutorial, we will look into applications and use cases of vehicular networking followed by an overview of the standardization activities. Next we will cover the communication protocol design as well as the deployment plans. We will also briefly talk about simulation tools for evaluation of various protocol designs. Before concluding, we will take a glimpse at the recently emerging reality of electric vehicles and issues surrounding them. Finally, we will conclude with open issues that require further research.