



WWVC 2013

Abstract:

Statistical modeling of vehicular link performance

This talk is focused on the statistical analysis of a vehicular communication channel. We assume that the channel switches between different states, each having different packet loss probability. The transition between the different states of the channel is governed by a Markov chain, which cannot be directly observed from the performance measurements. However, the received packet flow provides some probabilistic information about the current state of the channel, as well as some information about the parameters of the model. We will discuss the influence of various modeling aspects and analyze how many states are required to pertinently model a real communication channel.

Bio:

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Veronika Shivaldova received the Bachelor degree in television, radio communication and radio broadcasting from Tashkent University of Technology in 2007 and Dipl.-Ing. degree in Telecommunications from Vienna University of Technology (VUT) in 2010. She is a member of the Christian Doppler Laboratory for Wireless Technologies for Sustainable Mobility and is currently working towards PhD within the group of vehicular connectivity at the Institute of Telecommunications at VUT. Her current research is focused on measurements and statistical modeling of intelligent transportation systems performance.