

Call for Papers



3rd GI/ITG KuVS Fachgespräch Inter-Vehicle Communication

March 19th–20th 2015, Ulm, Germany · fg-ivc.car2x.org

Motivation

Inter-vehicle communication (IVC), the management and control of network connections among vehicles as well as between vehicles and existing network infrastructure, is a maturing research field that is currently gaining massive momentum. The investment of European automobile manufacturers and OEMs into this idea is not only expressed in successful efforts to reserve dedicated radio spectrum harmonized across Europe, but is also reflected in numerous research ventures in cooperation with academia.

First standardization efforts across all layers, by both IEEE and ETSI, have already borne fruit, allowing researchers to gain valuable insights into both the strengths and the shortcomings of current approaches.

A tremendous body of experience could be gathered in both national and international large scale field tests as well as in the domain of simulation and modeling. However, this knowledge is still fragmented, making it hard for new players to get into the game and affording even experienced groups only a restricted view on this complex field.

Goals

We invite young researchers and their experienced colleagues to discuss new research directions and early results in the areas of inter-vehicle communication and automated vehicles.

This third edition of the GI/ITG KuVS Fachgespräch Inter-Vehicle Communication will discuss vehicular communications in general, this year also inspired by new ideas in the context of automated vehicles. Automated driving has made several leaps forward in the past years, with the Google Car reaching a record of about 1.1 million autonomously driven kilometers and governments across the world starting the legislative process that will allow purchased autonomous vehicles to drive on normal roads. This significant progress led some to pose the question of the necessity of vehicular communication systems, considering the many privacy and security issues associated with them.

Venue & Lodging

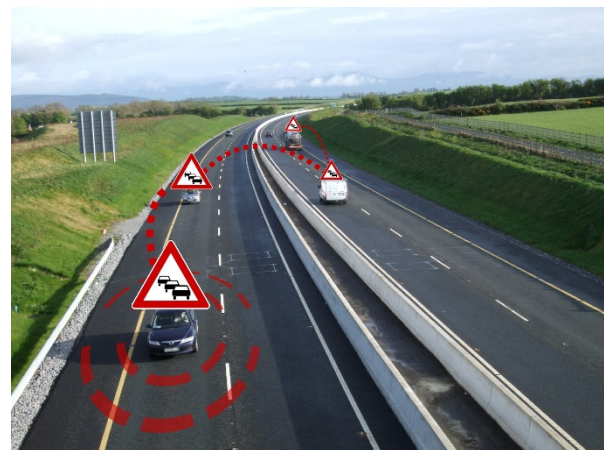
The event will take place at Villa Eberhardt, a building that was previously the residence of the Eberhardt family that was donated to the University of Ulm. The building is located near the city and is easily accessible by public transportation.

Topics of Interest

Communication protocol design and network management · channel modeling, modulation and coding · congestion control and scalability issues · medium access control protocols · multi-channel organization and operation · vehicle to vehicle, roadside, internet communication · vehicle to cyclist and vehicle to pedestrian communication · applications of vehicular networks · simulation frameworks · real-world testbeds · autonomous driving · cooperative driving · security in automated vehicles · traffic management for automated vehicles · human interfaces for automated vehicles · security issues and countermeasures · misbehavior detection in vehicular and in-vehicle communication · privacy in traffic applications · electric vehicle applications.

Submission

Manuscripts of 2-4 pages, formatted according to IEEE conference layout, should be submitted as PDF documents by email. Accepted contributions will be published in a technical report (thus, the copyright will remain with the authors). Detailed information is available online at fg-ivc.car2x.org



Important Dates

- ▶ Extended Abstracts: February 13th, 2015
- ▶ Acceptance Notification: March 2nd, 2015
- ▶ Event: March 19th-20th, 2015

Organizing Committee

- ▶ Rens W. van der Heijden
- ▶ Stefan Dietzel
- ▶ Frank Kargl
- ▶ Raphaël Frank
- ▶ Christoph Sommer