Abstract:

Dedicated Short Range Communications (DSRC) based Vehicle-to-Vehicle (V2V) and Vehicle-to-Infrastructure (V2I) communication in conjunction with Global Navigation Satellite System (GNSS)-based positioning enable a host of applications that could improve driving safety, comfort, and efficiency of equipped vehicles. The capabilities of DSRC technology and GNSS positioning technology as applicable to V2V Driver Assistance System (DAS) applications have been investigated extensively by General Motors.

General Motors unveiled a fleet of vehicles equipped with DSRC V2V communication and GPS positioning capability in 2005 for public demonstrations. GM has demonstrated these capabilities in numerous other North American venues since then. This presentation talks about some of the GPS-based navigation and positioning Research and Development work done by General Motors R&D and Planning over the last few years.