



# Advance Connected Vehicle Research Through Cross-Platform Simulation

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**Date: Monday, October 28, 2013**

**Time: 12 Noon— 1:00 PM**

**Location: GWC 487 (Parking)**

**Lunch will be provided**

**Speaker:**

Pengfei Li (Taylor) got his Ph.D. in transportation engineering from Virginia Tech in 2009 and joined an engineering consulting company in Maine as a senior transportation engineer. In 2010, he joined the Kentucky Transportation Center at the University of Kentucky as a traffic and ITS research engineer where he was the primary developer of a prototype Bluetooth-based travel time estimation system and co-founder of the first traffic signal research lab. He also customized a hardware-in-the-loop simulation system to couple PTV VISSIM and 170 signal controllers for multiple research projects in Kentucky. In 2012, he joined the Centre for Smart Transportation at University of Alberta in Canada and his responsibilities include developing proposals, leading projects and mentoring graduate students. Dr. Pengfei Li's research interests include Traffic Signal Control, Connected Vehicle, Arterial Management, Traffic Modeling, Traffic Data Capturing as well as Prototyping. Dr. Pengfei Li is a professional engineer registered in Alberta Province in Canada.

**Abstract:**

Connected Vehicle (CV) technology reflects the latest development of intelligent transportation systems and its benefits in mobility and safety have been proven in the last 10 years. Nonetheless, the wireless communication within vehicular networks is normally not familiar to transportation researchers and this key technology has been used as a "blackbox" in related transportation research. As a result, insufficient knowledge in wireless communication increasingly prevents us to advance the CV research. In this seminar, the presenter will explain the official wireless communication standard for Connected Vehicle, the 5.9 GHz dedicated short-range communication (DSRC) standard. The presenter will also introduce a concept of cross-platform simulation test bed.

**ALL ARE WELCOME!**