

Multiple Approaches to Assess the Safety Benefits of Connected Vehicles

Architecture, Building and Civil Engineering Sir Frank Gibb building RT0.25

Friday 6th December 2019 11:30 – 13:30 including networking lunch.

Please [contact us](#) if you have dietary preferences.

[REGISTER HERE](#)

Seminar Overview

Much progress has been made recently in the area of Connected Vehicles (CVs) research and practice. The technologies used in Connected Vehicles have potential to greatly improve safety and the driver's awareness of hazardous conditions. Coupled with low level automation, CVs can achieve even better performance. This seminar will present the results of multiple research projects addressing various issues relevant to CVs. These research projects have addressed issues such as adverse weather, vehicle's platooning, P2V (physical to virtual), I2V (invisible to visible), and CV market penetration, while applying different research tools and analysis techniques which include Microscopic Traffic Simulation, Driving Simulation and field studies. The results have provided evidence for the capability of CVs in addressing several traffic needs and have shown that the market penetration rate (MPR) has a significant impact on the acceptance of CVs. Advanced technologies for CVs are expected to have positive effects on road safety and at the same time computer visualisation techniques could be highly beneficial to traffic safety research and performance in many applications.

Presenter

Dr. Mohamed Abdel-Aty, PE is a Trustee Chair at the University of Central Florida (UCF). He is a Pegasus Professor and the Chair of the Civil, Environmental and Construction Engineering Department at UCF, leading the Future City initiative. His main expertise and interests are in the areas of traffic safety analysis, simulation, big data and data analytics, ITS and CAVs. Dr Abdel-Aty is well recognized nationally and internationally for work and research in real-time safety, proactive traffic management, integrating road safety and transportation planning and Connected Vehicles. In 2015, he was awarded the Pegasus Professorship, the highest honor at UCF. During his career Dr Abdel-Aty has managed more than 62 research projects and published more than 600 papers, 305 in journals (Citations Google Scholar: 15727, H-Index 65). He is the Editor-in-Chief of Accident Analysis and Prevention, the premier journal in safety, and the Associate Editor of Transportation Research Interdisciplinary Perspectives (TRIP), Elsevier. He is a member of the Editorial Boards of the ITS Journal, Analytic Methods in Accident Research, the International Journal of Sustainable Transportation and member of multiple TRB Committees, including Safety Data, Analysis & Evaluation, Safety Performance and User Information Systems. He is a Co-Chair of the ASCE Transportation Safety Committee and received the Francis C. Turner award from ASCE for his "outstanding leadership in the field of road safety nationally and internationally". He has also received the 2019 Transportation Safety Council Edmund R. Ricker Award from ITE, and the Lifetime Achievement Safety Award from ARTBA.

[REGISTER HERE](#)