

The 2021 John Adjeleian Lecture: New Advances in Transportation Safety Research with Professor Tarek Sayed



Lecture Synopsis

Most current research on road safety focuses on statistical techniques to model crashes and evaluate safety countermeasures. Less attention has been devoted to improving our understanding of crash causes and road user behavior. This is unfortunate, given the lack of understanding of the complex interaction of crash factors, how safety measures work, and how they affect road user behavior. Crashes represent instances in which the road system has failed, yet our understanding of the failure mechanism is relatively poor, thus reducing the accuracy of the diagnosis and remedy processes. Currently, to identify and diagnose safety problems, a relatively large number of crashes need to be observed which we subsequently strive to prevent. Therefore, there is a need for a proactive approach to road safety analysis, which seeks to diagnose safety problems and to identify suitable countermeasures before crashes take place. With the introduction of new modes of mobility and the complex interactions created by these different modes there is a need to rely on advanced research and analysis techniques to support policies towards the transition to these new forms of mobility. Several methods and techniques developed in this area will be described with example projects from several agencies worldwide

Speaker Bio



Tarek Sayed, Ph.D., P.Eng., FCAE, FEIC, FCSCE

Tarek Sayed is a distinguished professor and a Tier 1 Canada Research Chair of Transportation Safety and Advanced Mobility at the University of British Columbia.

He is a Fellow of the Engineering Institute of Canada, the Canadian Academy of Engineering, and the Canadian Society for Civil Engineering.

For his outstanding contributions to transportation safety, Dr. Sayed has received a large number of honors and awards including the Sandford Fleming Award from the Canadian Society of Civil Engineering (2009), the Award of Academic Merit from the Transportation Association of Canada (2010) the Wilbur Smith Distinguished Transportation Educator Award from the Institute of Transportation Engineers (2011) and the Prince Michael International Road Safety Award for the most outstanding international road safety initiative.

In the course of his research, he has addressed a wide spectrum of transportation system applications with a focus on traffic operation and safety, Intelligent Transportation Systems, and the application of information technologies.

The John Adjeleian Annual Lecture



The annual John Adjeleian Lecture was established in 2003 to honour the late John Adjeleian, Emeritus Professor of Engineering at Carleton University, for his outstanding contributions to the university and to the profession of civil engineering. He was the founder of the firm Adjeleian Allen Rubeli Ltd., which has provided engineering services for over 3000 engineering projects including many known for their outstanding structural design, such as the Fathers of Confederation Memorial Building in Prince Edward Island, National Arts Centre in Ottawa, and the SkyDome (now Rogers Centre) in Toronto.