



PacTrans Regional Transportation Seminar

Speaker: Prof. Kaan Ozbay
Date: Wednesday, October 23, 2019
Time: 2:30 - 3:30pm, PST
Location: UW Seattle Campus
Husky Union Building (HUB) 332
Reception to Follow



Webinar URL

<https://youtu.be/3JYa6nX378s>

Title

Towards a Safer Urban Transportation System in the Era of Connected & Autonomous Vehicles and Big Data

Abstract

In the last several years, C2SMART researchers have been developing novel predictive and operational approaches to improve traffic safety especially in urban areas. Most of the innovation in these research and deployment efforts are fueled by the availability of big data generated by connected & autonomous vehicles (CAV) as well as ubiquitous mobile devices and sensors deployed throughout the urban areas. In the first part of the talk, it will be argued that in an era of disruptive change experienced by all of our transportation systems, there is a need for a comprehensive cyber-physical testbed to develop, verify, and validate novel traffic safety strategies. To support this broad argument, C2SMART's cyber-physical testbed which is built around the concept of "city as the lab" will be described. In the second part of the talk, the development of predictive safety analytics functions and pro-active traffic safety management approaches with a focus on New York City will be presented. The role of the cyber-physical test bed in these research efforts will be emphasized.

Speaker



K. Ozbay joined Civil and Urban Engineering at NYU Tandon School of Engineering and Center for Urban Science and Progress (CUSP) as a tenured full Professor at NYU on August 2013. He is currently the Director of the C2SMART Center (Tier 1 UTC funded by USDOT). Prior to that Professor Ozbay was a tenured full Professor at Rutgers University's Department of Civil and Environmental Engineering where he joined as an Assistant Professor in July 1996. In 2008, he was a visiting scholar at the Operations Research and Financial Engineering (ORFE) Department at, Princeton University. Professor Ozbay has more than 30 years of expertise in transportation and traffic engineering. His research interests in transportation cover a wide range of topics including the development of simulation models of large networks with connected and autonomous vehicles, advanced technology and sensing applications for Intelligent Transportation Systems, modeling and evaluation of traffic incident and emergency management systems, among others.

For questions, please contact Cole Kopca, Assistant Director for PacTrans, at pactrans@uw.edu | 206.685.6648 | www.pactrans.org
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