



New Opportunities in Traffic Safety Analytics Using Advanced Quantitative Methods and Big Data

by

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Speaker's Biography

Dr Xie is currently a Lecturer in the Department of Civil and Natural Resources Engineering at University of Canterbury (UC). He received his PhD degree in Transportation Planning and Engineering from New York University (NYU). Prior to joining UC, he worked as a Postdoctoral Associate in the Center for Urban Science and Progress (CUSP) at NYU. His research areas include traffic safety, emergency management, connected vehicles, smart sensing, and urban informatics. He is passionate about using statistical models and machine learning algorithms to explore innovative solutions to transportation issues. He has received IEEE ITSS Best Dissertation Award, CUTC Milton Pikarsky Memorial Award and Transportation Research Board (TRB) Best Paper Award for his research outcomes.

Date: 12th October 2018 (Friday)
Time: 5:30 pm – 6:30 pm
Venue: Room Z414, 4/F, Block Z,
181 Chatham Road South, Hunghom,
The Hong Kong Polytechnic University

Abstract

Traffic safety issues are gaining increasing attention. It becomes essential to leverage novel methodologies and emerging datasets to obtain innovative solutions to safety issues. Quantitative methods have been used in the last few decades to explore safety-related data and to provide critical inferences to essential tasks of road safety management such as investigation of risk factors, before-after safety evaluation and hotspot identification. There have been steady improvements in quantitative methodologies over time (e.g., Bayesian methods and Markov models), which can help discover new knowledge from data available. In the era of big data, a massive amount of data has been digitized and available at a larger scale. Meanwhile, emerging data sources such as connected vehicles, traffic cameras, smartphones and social media can be leveraged to extract rich information for decision-makings. This talk will discuss new opportunities in traffic safety analytics with the advances in quantitative methods and large-scale datasets.

*** All Interested Are Welcome ***

For further information, please contact Dr. Tony Sze at Tel. 2766-6062.

Free Admission. Please reserve your seat with Ms. Connie F.Y. Lam by email: fyc.lam@polyu.edu.hk.

Certificates of attendance will be provided to participants who attend the whole seminar.