

You are cordially invited to a Seminar Organized by

Centre for Transportation Research of Department of Civil and Environmental Engineering

Better Skid Management Saves Lives

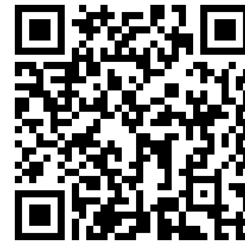
By

Professor Jorge Prozzi

Department of Civil, Architectural and Environmental Engineering
Cockrell School of Engineering
The University of Texas at Austin

Host: Prof Meng Qiang, Director of Centre for Transport Research (CTR) of CEE

Date: 15 May 2023, Monday
Time: 10 am – 11 am
Venue: E1-06-04
National University of Singapore
College of Design and Engineering
3 Engineering Drive 2,
Singapore 117578



Scan code to
register

*****Seats are limited. Please register early. All are welcome and admission is free*****

Abstract

The skid resistance of a highway pavements is essential for providing road user safety. There is a strong correlation between pavement skid and the number of wet-weather crashes: as skid resistance doubles, the rate of wet-weather crashes could be halved. However, the measurement of skid resistance at the network level cannot be executed in an efficient manner and large highway networks are typically sampled less than ten percent annually. Besides, traditional skid equipment is associated with a high environmental impact in terms of water usage and tire wear.

This presentation will explain how using high-definition lasers and machine learning tools, surface profile information can be used to estimate skid with a high degree of accuracy. The preliminary models estimate skid resistance of flexible pavements with an accuracy eighty percent. This innovative approach has the potential to enable highway agencies to obtain full network coverage of reliable estimates of skid on an annual basis and, consequently, apply timely corrective actions, reduce the number of crashes, save lives and reduce the environmental impact.

