



Department of
Mechanical Engineering
The University of Hong Kong



SEMINAR

The Research on Driver's Perceived Risk Field based on individualized driving style assessment

- Date:** 29 March, 2023 (Wednesday)
Time: 11:30 a.m.
Venue: Room 7-34, Haking Wong Building, HKU
- Speaker:** Mr. Zhengjie Shu (M.Phil. candidate)
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Abstract:

Researchers are exploring ways to create a personalized driving style for autonomous vehicles that can adapt to different traffic situations while maintaining safety. One approach is to integrate risk-cost indicators and field theory into the driver model to create a risk field that reflects the risks associated with different driving behaviors. Machine learning methods have also been applied to personalized driving style classification tasks with good performance. However, these driver models are relatively simple in terms of driving style classification, and style parameters cannot be adjusted adaptively during the realization of driving behavior. To address this limitation, scene controllers will be added to the driver risk field model to express driving style characteristics in different scenarios. Additionally, deep learning-based driving style classification will be integrated with the model to create a more personalized driver model, which will be evaluated using driver data collected from simulation experiments.

ALL INTERESTED ARE WELCOME

For further information, please contact Dr. P. Lu at 3910 2548.