## LSGI RESEARCH SEMINAR

LiDAR and Autonomous Vehicles: North America Market Update in 2025



) 10:00 AM - 12:00 PM

**Q** Z414, POLYU

**ENGLISH** 

Dr Wai Yeung YAN

Adjunct Professor Toronto Metropolitan University, Canada



## **ABSTRACT**

Full Self Driving (FSD) and Advanced Driver Assistance System (ADAS) have blossomed in various regions lately. The talk basically covers and summarizes the latest news of FSD development in North America, including its good and bad, across the last four quarters. Tesla has faced various setbacks in deploying FSD and Robotaxi, and has been reported with a number of severe accidents and lawsuits. Google's Waymo seems to have set the standard of FSD in North America, where their Robotaxi has been successfully deployed and expanded in California, Arizona, Texas, and Georgia, some of which partnering with Uber, yielding over 200,000 paid rides per week. The LiDAR sector faces a challenging time due to the post-pandemic era, geopolitical tension, patent infringement, and limited gross margin in the ADAS sector. Sensor advancement, especially the latest development of 4D radar and 4D lidar, further improves the reliability of FSD under bad weather condition. Development of HD map is currently undergoing in various states, and finally, the talk covers a few examples of policy and infrastructure advancement, all paving the way for the development of reliable FSD systems.

## **BIOGRAPHY**

Dr. Wai Yeung Yan received the Ph.D. degree in Civil Engineering from Ryerson University, Toronto, ON, Canada, in 2012. He is currently an Adjunct Professor with the Department of Civil Engineering, Toronto Metropolitan University. His research interests include improving light detection and ranging (LiDAR) data quality, point cloud processing, laser scanning, and remote sensing. He is currently a senior member of IEEE and a senior editor of SPIE Journal of Applied Remote Sensing. He receives a number of prestigious awards, including 2012 Governor's General Academic Gold Medal, 2016 ISPRS Otto von Gruber Award, 2020 Canadian Remote Sensing Society Bronze Award, and 2025 G. Raymond Chang Outstanding Volunteer Award.

## **Moderator: Prof. Tiangang YIN, LSGI**

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Enquiry: Mr Jimmy Kwan | Tel: (852) 2766 4350

Email: jimmy.lh.kwan@polyu.edu.hk







