

**DEPARTMENT OF MECHANICAL ENGINEERING****SEMINAR****Online**

Title: Pixel-level Extrinsic Self Calibration of High Resolution LiDAR and Camera in Targetless Environments

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Date: 22 April, 2021 (Thursday)

Time: 10:30 a.m.

Zoom Link: 1) Link to join the meeting:

<https://hku.zoom.us/j/94603933541?pwd=L2w2OFIzc0pKaGQ3OERBcjJaaXZWQT09>

2) Meeting ID: 946 0393 3541

3) Password: 242469

Abstract:

Light detection and ranging (LiDAR) and camera sensors are commonly combined in developing autonomous driving vehicles. LiDAR sensor, owing to its direct 3D measurement capability, has been extensively applied to obstacle detection, tracking, and mapping applications. The integrated onboard camera could also provide rich color information and facilitate the various LiDAR applications. With the recent rapid growing resolutions of LiDAR sensors, the demand for accurate extrinsic parameters becomes essential, especially for applications such as dense point cloud mapping and colorization. We will introduce an automatic pixel-level extrinsic calibration method in targetless environments to address the challenges of traditional calibration methods.

ALL INTERESTED ARE WELCOME

For further information, please contact Dr. F. Zhang at 3917 7909.

Research area: Robotics and Control