

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

Title: Robot Indoor Localization Using Visible Light Positioning

Speaker: Mr. Guan Weipeng (PhD candidate)
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Date: 26 April, 2022 (Tuesday)

Time: 10:30 a.m. (Hong Kong Time)

Zoom meeting: 1) Link to join the meeting:

<https://hku.zoom.us/j/95814019582?pwd=R1o4M2o3cENZREkwbWpuRy9XS1lBdz09>

2) Meeting ID: 958 1401 9582

3) Password: 426339

Abstract:

Precise localization is a prerequisite for many autonomous systems, such as robotics, unmanned aerial vehicles, etc. Also, indoor positioning is an especially challenging problem, where localization cannot be achieved by GPS due to the satellite signal being greatly attenuated, while the traditional radio-based indoor positioning technologies still have some disadvantages in terms of low accuracy, high latency, electromagnetic interference or high hardware cost. Here Visible light positioning (VLP) technology comes in, which is a promising technology since it can provide high accuracy indoor localization based on the existing lighting infrastructure. Therefore, we proposed high accurate and robust VLP algorithm for robot indoor localization, which achieves state-of-the-art. In this seminar, the contributions of our VLP for robot indoor localization will be present and demonstrated.

ALL INTERESTED ARE WELCOME

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

Research area: Robotics and Control