



Department of
Mechanical Engineering
The University of Hong Kong



SEMINAR

Task planner and motion planner for robot manipulator in some logistic and manufacturing scenario

Date: 29 March, 2023 (Wednesday)
Time: 1:00 p.m.
Venue: Room 7-34, Haking Wong Building, HKU

Speaker: Mr. Erdong Xiao (PhD candidate)
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Abstract:

With the development of robotic manipulators (faster movement and higher motion accuracy, and cheaper cost), using the manipulator to accomplish some challenging tasks or even replace the workers are becoming possible and more and more popular. Especially in some logistic scenario or the manufacturing scenario, as long as the cycle time requirement and the accuracy requirement can be fulfilled, using robotic manipulators to replace or cooperate with human workers can bring huge benefits. In order to meet the three main general requirements (cycle time, accuracy, safety) of those tasks, the software layer of the robotic system is normally divided into 4 layers: vision, task planner, motion planner, robot driver. This seminar will focus on the task planner and motion planner layers, introduce about their program structure and some widely used algorithms (PRM, RRT, A*, etc.), and share some actual applications about robotic manipulators in the logistic project.

ALL INTERESTED ARE WELCOME

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