

SEMINAR ANNOUNCEMENT

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING
COLLEGE OF DESIGN AND ENGINEERING
Website: <https://cde.nus.edu.sg/ece>

Area: Control, Intelligent Systems & Robotics

Host: Assoc Prof Prahlad Vadakkepat

TOPIC	:	An Introduction to a Nascent Class of Heuristic Bug-based Path Planning in 2 dimensions.
SPEAKER	:	Mr Lai Yan Kai Graduate Student, ECE Dept, NUS
DATE	:	Wednesday, 20 April 2022
TIME	:	11.30AM to 12.00PM 11.00AM to 11.30AM
WEBINAR	:	Join Zoom Meeting https://nus-sg.zoom.us/j/85906036759?pwd=bWlzNXBsQktZZ0d3VE0wTnJIS1IKdz09 Meeting ID: 859 0603 6759 Passcode: 921547

ABSTRACT

This seminar describes how global path planning in 2 dimensions can be improved using a cast-and-trace, or bug-like approach. This stems from vector-based navigation used in nature, which reduces the number of line-of-sight checks and free-space expansions especially in large, sparse maps used in many robotics applications. RayScan, a planner that is correct for convex obstacles in this nascent class, will be briefly described for this introduction.

BIOGRAPHY

Lai Yan Kai received his B.Eng. degree in 2019 from National University of Singapore in Electrical Engineering. He is currently pursuing the PhD degree with the Department of Electrical and Computer Engineering, National University of Singapore. His research interests include path planning for mobile ground robots.

<https://cde.nus.edu.sg/ece/highlights/events/>