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 (CISR)

Host: Asst Prof Zhao Lin

| TOPIC | : | Indoor Vision-Language Navigation for Autonomous Drone |
|---------|---|--|
| SPEAKER | : | Mr Guo Shao Graduate Student, ECE Dept, NUS |
| DATE | : | Wednesday, 12 November 2025 |
| TIME | : | 10:00AM-11:00AM |
| VENUE | : | Join Zoom Meeting https://nus-sg.zoom.us/j/83146249984?pwd=AFMJpbApyWYcv0ixLmpUJxU3Be3DCx.1 Meeting ID: 831 4624 9984 Passcode: 826519 |

ABSTRACT

This talk introduces an indoor 3D Vision-Language Navigation framework for autonomous drones. We present a custom 3D-VLN dataset built in Habitat, a VLM fine-tuning pipeline, and a curriculum learning strategy for end-to-end navigation task. The work highlights progress toward indoor drone navigation guided by natural language.

BIOGRAPHY

Guo Shao is a graduate student working on MLLM-based navigation for autonomous drone.

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