

Keefe Ker Tan

+65 92336267 · Keefeker@gmail.com · <https://www.linkedin.com/in/keefekertan/> · <https://KeefeKer.github.io>

SUMMARY

Engineering student specializing in robotics systems, with hands-on experience in autonomous navigation, LiDAR mapping, and ROS-based development. Seeking a robotics or embedded systems role to apply real-world SLAM and path planning techniques.

EDUCATION

Singapore Institute of Technology

Sep 2024 - Present

Bachelor of Engineering with Honours in Robotics Systems

Republic Polytechnic

Apr 2021 – Apr 2024

Diploma in Engineering System and Management

Institute of Technical Education

Apr 2016 – Apr 2018

Higher Nitec in Information Technology

EXPERIENCE

Singapore Armed Forces

Oct 2018 – Aug 2020

Infantry Trooper (Full-time National Service)

- Appointed Section 2IC (Second-in-Command) for performance and leadership potential
- Conducted security operations and key installation protection under demanding conditions
- Awarded IPPT Gold and Marksmanship Award for physical excellence and combat proficiency
- Recognized for outstanding service, quick learning, logical thinking, and strong work ethic in Commander's appraisal
- Completed Infantry Vocation Training Phase 1 and attained WSQ Employability Skills accreditation

Timberland / Under Armour

Nov 2014 – Aug 2020

Retail Sales Associate

- Delivered strong customer service and product recommendations tailored to customer needs
 - Maintained merchandise presentation and visual display standards across both premium retail brands
 - Promoted brand identity through product knowledge and training
 - Handled point-of-sale operations accurately and efficiently during high-traffic periods
 - Supported inventory processing, stock replenishment, and backroom organization
 - Consistently met or exceeded sales targets and contributed to a positive team environment
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PROJECT

ROS Navigation with Limo Robot (SE Project 1)

- Developed a ROS1-based navigation system using RTAB-Map SLAM and the Navigation Stack
 - Tuned costmaps and DWA planners for improved real-time obstacle avoidance
 - Integrated LiDAR and depth camera to generate live 2D/3D maps
 - Used RViz and ROS tools for live debugging, trajectory visualization, and system calibration
 - Conducted multi-scenario testing across different terrain and obstacle layouts
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SKILLS & INTERESTS

Languages: English, Mandarin, Hokkien

Programming/Software: HTML, CSS, C, C++, Python, ROS1, Linux Development, Git

Technical Skills: SLAM (Simultaneous Localization and Mapping), LiDAR-based Localization, Navigation

Leadership Skills: Communication, Team Collaboration, Problem-Solving, Adaptability, Decision-Making

Interest: Running, Swimming
