Logadarrshini Kandaraj

Email: logadarrshini13@gmail.com

Mobile: +65 89544192

www.linkedin.com/in/logadarrshini-kandaraj

Personal Summary

I am a Robotics Systems Engineering student with foundational knowledge in IT and cybersecurity. Actively developing skills in ROS, STM32 and system integration through academic projects and hands-on learning. Passionate about building secure, intelligent robotic systems and gaining real world engineering experience.

Summary of Key Skills

- Programming skills in C++, C, Python and SPIN.
- Basic 3D modelling, assembly, drawing using SolidWorks.
- Exposure to Systems Engineering principles.
- Handling Microcontrollers such as STM32 and Propeller 1.
- Effective team member who provides insightful opinions and solutions.
- Hands-on experience with basic breadboard circuit prototyping, including wiring, assembly, and setup of electronic components.
- A critical thinker and active listener.
- Proficient in English, spoken and written.

Work & Project Experience

Systems Engineering Project 1   **May 2025 – July 2025**
Singapore Institute of Technology

Autonomous Robot Navigation Using ROS

- Build robot navigation system using ROS, SLAM and RTAB-Map.
- Implemented waypoint navigation and obstacle avoidance.
- Integrated sensors and tuned cost maps for stable movement.

Robot Pixy2 Vision Project   **Jan 2025 – March 2025**
Singapore Institute of Technology

Mecanum wheeled robot colour tracking

- Build a mecanum-wheeled robot capable of tracking and following a specific colour signature in real time using Pixy2 camera
- Programmed motor control logic to follow the detected target smoothly.
- Tuned movement behaviour for stable omni-directional navigation

IT Intern   **Sept 2022 – Jan 2023**
Appzgate Solutions Pte Ltd

- Implemented SEO & SEM strategies to improve website visibility for clients.
- Introduced DevOps methodologies to the Development team to streamline processes and expedite software deployment.
- Assist the Senior Developer and Team in all stages of the SDLC.
- Maintained and updated data in information systems and databases.

- Assisted in troubleshooting and testing developed websites and provided suggestions and solutions to improve user experience.
- Marketed companies' products to potential clients at events such as FHA - HoReCa and Chillax Asia.

Final Year Project   **Apr 2022 - Aug 2022**
Republic Polytechnic

Building a CI/CD pipeline for a simple web application

- Involved in the release and deployment stages of the DevOps life cycle.
- Used platforms and tools such as GitHub, Docker, Jenkins, and AWS Cloud.
- Configured Docker images to host the web application.
- Configured Jenkins scripts to create a CI/CD pipeline that links Docker and other tools used by the team and to automate the pipeline hosted in AWS Cloud instances.

Education

Bachelor of Engineering with Honours in Robotics Systems   **2024 - Present**
Singapore Institute of Technology (SIT)

- Programming in C, C++, SPIN, Python
- MCU: Propeller1, STM32
- SolidWorks
- Basic Systems Engineering Concepts
- ROS 1 & ROS 2

Specialist Diploma in Cybersecurity Practice   **2023 – 2024**
Ngee Ann Polytechnic

- Networking & IT Infrastructure
- Windows & Linux Server Administration
- Cybersecurity Fundamentals
- Cloud Systems Administration
- Ethical Hacking & Penetration Testing
- Cyber Forensics Investigation
- Cybersecurity Operations
- Cybersecurity Risk & Compliance

Diploma in Information Technology   **2020 – May 2023**
Republic Polytechnic

- Objected Oriented Programming in Java
- Internetworking & Internetworking Security
- IT Security & Management
- Software Development Process
- Database systems
- Web Application Development in .NET
- Ethical Hacking
- IT Service Operations With AI
- Data Centre and Cloud Management
- IT Service Delivery

Achievements & Awards

- Edusave Good Progress Award   **2022**
- National Youth Achievement Award - Bronze Medal   **10 Jan 2019**