

# TAN LING JEN

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## PROFESSIONAL SUMMARY

A highly motivated final year electrical engineering student with a 2<sup>nd</sup> major in computing. Keen interest and passion for programming and engineering. Actively looking for AI/ML engineering projects and opportunities to embark on.

## EDUCATION

**Bachelor of Engineering** National University of Singapore (NUS) Aug 2021 - May 2025 (Expected)

- Major in Electrical Engineering
- 2<sup>nd</sup> Major in Computing
- Academics: CGPA 4.27 / 5.00 (Honours with Distinction)

**Relevant Modules:** Programming Methodology I (*Python*), Microcontroller Programming and Interfacing (*ARM Assembly, C*), Introduction to Machine Learning (*Python*), Data Science for the Internet of Things (*Python*), Data Engineering Principles (*Python, AWS*)

**Certifications:** [Machine Learning and AI with Python by HarvardX](#), [Introduction to Java Programming I by HKUSTx](#)

## WORK EXPERIENCE

**Engineer, Intern** DSO National Laboratories May 2024 - Aug 2024

- Explored in-memory computing for hardware acceleration of Large Language Models (LLMs).
- Developed software for the computation of matrix multiplication on the Gemini Associative Processing Unit (APU).

**Associated Skills:** C Programming, In-memory computing, LLM Processing Flow, Transformer Architecture

**Software Engineer (Robotics), Intern** ST Engineering (Land Systems) Jan 2024 - May 2024

- Awarded with the Intern @ ST Engineering Award.
- Implemented and integrated modules for 3D path planning and navigation of Q-UGVs.
- Developed algorithms for effective and robust traversability analysis of terrain.

**Associated Skills:** C++, ROS, Ubuntu, Robotics Navigation, Bash

**Systems Engineer, Intern** NCS Group (NCS Engineering) May 2023 - Jul 2023

- Constructed interactive front-end UI for an active enterprise-level web application project utilizing React.
- Efficiently managed systems hardening of macOS devices for project deployments utilizing bash scripting.
- Performed the troubleshooting and maintenance of hardware systems deployed across multiple exhibitions.

**Associated Skills:** React, JavaScript, HTML, OS Hardening, Bash, C#, Troubleshooting

**R&D Engineer, Intern** Panasonic R&D Center Singapore May 2022 - Jul 2022

- Managed and co-authored the requirements analysis, system architecture, and wireframe design documentation.
- Modelled the prototyping and testing of LED display panel (Soft Soldering).

**Associated Skills:** Technical Documentation, Requirements Analysis, System Architecture

**NSF Training Instructor, 3<sup>rd</sup> Sergeant** Singapore Armed Forces (SAF) Apr 2019 - Apr 2021

- Completed the Logistics Specialist Cadet Course (Transport) and achieved 3<sup>rd</sup> Sergeant rank.
- Oversaw and managed over 300 transport trainees on course in the School of Transport and Supply.
- Completed SAF Class 3/4 Driving Course at ST Engineering Land Systems.

**Associated Skills:** Leadership, People Management, Effective Communication

## PROJECTS

**Spending Tracker** (<https://github.com/Jen999/spending-tracker>) Aug 2023 - Nov 2023

- Designed and developed an end-to-end Android app to address habitual spending, promoting financial responsibility.
- Pursued this personal project as an NUS credit-bearing [EG2606B Independent Work](#) module.
- Learnt full-stack mobile application development independently and UI/UX design under expert supervision.

**Associated Skills:** React Native, JavaScript, Firebase (Firestore, Cloud Functions), Figma

## SKILLS & INTERESTS

- Skills:** Python, C, C++, React, React Native, JavaScript, Firebase, HTML, CSS, ROS, Ubuntu, Robotics Navigation, Bash, In-memory Computing, Git, Web Development, UI/UX Design, Figma, Mobile App Development
- Languages:** English (Native), Mandarin (Proficient)