# TAN LING JEN

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# PROFESSIONAL SUMMARY -

A highly motivated Year 3 Electrical Engineering student with internship experience in software development and systems engineering. Actively looking for software-related internships and projects to embark on.

# **EDUCATION** –

### **Bachelor of Engineering**

### National University of Singapore (NUS)

Aug 2021 - Present

- Major in Electrical Engineering, specialization in Internet of Things (IoT)
- Academics: GPA 4.33 / 5.00 (Honours with Distinction)
- Expected Graduation: May 2025

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

### **WORK EXPERIENCE** —

# FPGA Engineer, Intern

#### **DSO National Laboratories**

May 2024 - Aug 2024

- Summer Internship to begin in May 2024.
- Training on the latest high-end FPGA structure, logic, memory performance, and high-speed data interfaces.
- Implementation and testing of FPGA architecture design on LLM's computing intensive modules.

Associated Skills: LLM Architecture and Processing Flow, FPGA Development, Verilog/VHDL

# Software Engineer (Robotics), Intern ST Engineering (Land Systems)

Jan 2024 - May 2024

- Internship (credit-bearing Industrial Attachment) to begin in January 2024.
- Development of algorithms to enhance multi-agent exploration system.
- Rigorous software and hardware validation.

Associated Skills: C++, Python, ROS

#### 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.
- Developed RESTful API endpoints in ASP.NET Core with error handling and response mechanisms implemented.
- Efficiently managed systems hardening of macOS devices for project deployments utilizing bash scripting.
- Troubleshooting and maintenance of hardware systems deployed across multiple exhibitions.

Associated Skills: React, JavaScript, ASP.NET Core, C#, HTML, OS Hardening, Bash, Troubleshooting

### R&D (Business Solutions), Intern

#### Panasonic R&D Center

May 2022 - Jul 2022

- Managed the Requirements Analysis and System Architecture documentation.
- Co-authored the UI 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, React, React Native, JavaScript, Firebase, HTML, CSS, Git, AWS, Web Development, UI/UX Design, Figma, Mobile App Development, Troubleshooting, OS Hardening, Technical Documentation
- Languages: English (Native), Mandarin (Proficient)