# 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, 3rd Sergeant**          **Singapore Armed Forces (SAF)**          **Apr 2019 - Apr 2021**
- Completed the Logistics Specialist Cadet Course (Transport) and achieved 3rd 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)