

Lai Zi Qing

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EDUCATION

Nanyang Technological University (NTU)

Aug 2020 – Jul 2024

- **Bachelor of Engineering (Electrical and Electronic Engineering)**
- **Honours (Merit)**
- Specialisation: **Info-Communications Engineering (Computer Engineering)**
- Relevant Modules: (1) *From Computational Thinking to Programming* (2) *Data Structure and Algorithms* (3) *Introduction to Data Science and Artificial Intelligence* (4) *Web Application Design* (5) *Information Security* (6) *Artificial Intelligence and Data Mining* (7) *Computer Communications* (8) *Enterprise Network Design* (9) *Software Engineering*

Virtual Training and Learning & Development

- Relevant Modules (LinkedIn Learning): (1) *Learning Linux Command Line* (2) *Learning TypeScript* (3) *Learning the JavaScript Language*

INTERNSHIP EXPERIENCE

Seagate Singapore International Headquarters Pte Ltd, *Engineering Intern*

Jan 2023 – Jul 2023

- Executed testing on storage devices, ensuring they met specifications and performance requirements.
- Analysed failures encountered during testing and validated bugs with functional teams.
- Utilized automation tools to resolve and improve manual testing tasks.

ACADEMIC PROJECTS / MODULE PROJECTS

NTU-EEE Final Year Project: *Mobile Application Development*

Aug 2023 – May 2024

- Developed an Android mobile application using **Dart** and Flutter framework to capture graphic or text information from forms.
- The extracted data is securely stored in Firebase for future retrieval.

NTU-EEE Module: *Enterprise Network Design*

Jan 2024 – May 2024

Module Project: *Network Design and Address Allocation* (Team of 2)

- Designed and assigned IP addresses across multiple subnets and supernets, minimizing address wastage and enhancing routing efficiency.
- Implemented Access Control Lists (ACLs) to enforce security policies and tested configurations using Cisco Packet Tracer.

NTU-EEE Module: *Web Application Design*

Aug 2023 – Nov 2023

Module Project: *Web Portal for Online Purchase of Fashion Clothes* (Team of 2)

- Developed a web-based fashion retail portal with **HTML5, CSS3, JavaScript, PHP, and SQL**, enabling customers to browse and purchase items online.

NTU-EEE Design and Innovation Project: *Interactive Visual Object Segmentation by Deep Learning* (Team Treasurer of 7)

Aug 2022 – Nov 2022

- Designed a GUI using **Tkinter Programming** for visualization and demonstration purposes.
- Recognized as **Champion Team** in the 'Machine Learning and Data Analytics' program.

NTU-EEE Module: *Introduction to EEE Design and Project*

Jan 2022 – Apr 2022

Module Project: *Design Automatic Volume Controller for Audio Amplifier* (Team of 2)

- Designed an Automatic Volume Controller using **LabVIEW** and **NIE-ELVIS** hardware.

WORK EXPERIENCE

Nanyang Technological University, *Student Assistant*

Dec 2020 – Jul 2021

- Organized research paper submissions and checked copyright policies for compliance.
- Utilized Microsoft Excel to apply sorting and filtering techniques.

CO-CURRICULAR ACTIVITIES

NTU Chinese Society, *Secretary & Financial Controller* (Mid-Autumn Festival)

Sep 2020 – Sep 2021

- Coordinated administrative tasks, recorded minutes, and managed financial reports for events.

NTU-AMCISA Club, Orientation Group Senior (Freshman Orientation)

Aug 2021 – Nov 2021

- Guided freshmen in adapting to university life and student affairs, organized online bonding activities.

SKILLS

- **Languages:** Proficient in English, Chinese and Malay
- **Programming Languages:** HTML, CSS, Python, C, TypeScript, JavaScript
- **Frameworks & Libraries:** Flutter, Dart, React.js, Tailwind CSS, Firebase, Pandas, NumPy
- **Software Tools:** Cisco Packet Tracer, Docker, MATLAB, Tkinter, LabVIEW, LT-Spice XVII, XAMPP, Microsoft Office (Excel, Word, PowerPoint, Outlook)
- **AI & Machine Learning:** Decision Tree, Random Forest Classification