

Thomas Choi

0468-951-809 | thomaschoimelb@gmail.com | Melbourne
thomaschoi.io | github.com/thomaschoi143 | linkedin.com/in/thomas-choi-melb

Master of Computer Science international student at the University of Melbourne. Bachelor of Science (Computing and Software Systems) graduate with **academic excellence**. **Self-motivated** software engineer specialising in **full-stack web development** with **AWS Cloud certification**.

EDUCATION

The University of Melbourne

Master of Computer Science

From Mar 2024

- Expected graduation date: Dec 2025

Bachelor of Science in Computing and Software Systems

Mar 2021 – Dec 2023

- Notable subjects taken:
 - Algorithms and Data Structures (**C**, Grade: 91% H1)
 - Object-Oriented Software Development (**Java**, Grade: 92% H1)
 - Models of Computation (**Haskell**, Grade: 99% H1)
 - IT Project (capstone project, Grade: 96% H1)

TECHNICAL SKILLS

- Programming Languages: **JavaScript** | **TypeScript** | **SQL** | GraphQL | C | Haskell | Prolog | **Java** | **Python** | **HTML** | **CSS** | **Sass** | PHP
- Frameworks and Tools: **React** | **React Native** | **Vue** | **Redux** | **Express** | **Nest.js** | Next.js | Bootstrap | Tailwind CSS | Material UI | **MongoDB** | **Git** | Highcharts.js | Recharts.js | TypeORM | **Jest**

WORKING EXPERIENCE

Melbourne Space Program

Melbourne, VIC

ACRUX-2 On-Board Computer Team Lead

Jul 2023 – Present

ACRUX-2 On-Board Computer Software Engineer

Apr 2023 – Jul 2023

- **Direct** development of on-board computer subsystem team for student research and **host** weekly team meeting to continuously **mentor** team members and **transfer** technical knowledge to them
- **Coordinate** with leads across subsystems teams to design specifications of cube satellite
- **Develop** a low-level subsystem endpoint, complete with an extensive interface and hardware requirements **documentation**
- Integrate NASA FPrime software (C/C++) onto Raspberry Pi board for cube satellite flight applications

Beyond Zero Technology

Melbourne, VIC

Software Engineer Intern

Aug 2023 – Nov 2023

- **Developed and optimised** GraphQL and REST APIs in 4 servers with Nest.js, TypeORM, MongoDB and PostgreSQL in Agile team setting
- **Implemented** secure JWT authentication and RBAC authorisation with Auth0, fortifying system security and ensuring secure access control
- **Collaborated closely** with UI designers and **built** internal chart generator with high customisation using React and Recharts.js to boost team's productivity
- **Planned and conducted** comprehensive backend unit testing with **Jest** for 3 servers and frontend E2E integration testing with thorough documentation to ensure system reliability and robustness

- **Techs:** React w/ Vite, Nest.js, Next.js, unit testing w/ JEST, Python, GraphQL, REST APIs, TypeORM, PostgreSQL, MongoDB

Sensand
Software Engineer Intern

Melbourne, VIC
Jul 2022 – Oct 2022

- Worked in a **startup** with a team of 6 engineers to develop **frontend** of unified AgTech platform in **Agile environment**
- **Created** a user preference settings feature in collaboration with a backend engineer
- **Communicated** with UI designer to develop new frontend features to meet stakeholder and client's needs
- Techs: **Angular, Jest, Redux, RxJS, Tailwind CSS**, REST APIs, **Figma**

FEATURED PROJECTS

Project Vault: <https://thomaschoi.io/#/projects>

- Projects showcase on portfolio website
- Techs: **Vue, Sass**

Admin Dashboard

- **Responsive** dashboard for sales performance with data visualisation
- Techs: **MERN Stack, Redux**, Data Modelling, Material UI

A Weather Website in Macao: <http://std.puiching.edu.mo/~pcmsams/>

- Created a **responsive** and interactive website enhancing weather info communication in **community** during Typhoon season
- Reached **21K+ users** and **46.9K+ sessions locally and worldwide**
- Techs: jQuery, PHP, Highcharts.js, Data Modelling, SQL

EXTRA-CURRICULAR ACTIVITIES

UniMelb Computing and Information Systems Students Association (CISSA)
Education Officer

Melbourne, VIC
Apr 2022 – Nov 2022

- Subcommittee member of a club with **1500+ active members**
- **Collaborated** as part of Education team that organised **10 final exam revision workshops** for 300+ students in total
- **Demonstrated** in 2 exam revision workshops to 40+ students in total
- **Created** and **delivered** an Introduction to Git Workshop to 10+ students at Catalyst hackathon

HONOURS & CERTIFICATIONS

- **Engineering and IT Foundation Graduate Scholarship (2023)**
- **AWS Certified Cloud Practitioner (2023)**
- **Dean's Honours List for Top 3% (Level 1, 2)**
- Melbourne Employability Accelerator (2023)
- Melbourne Plus: **Innovation (2023)**
- **Melbourne International Undergraduate Scholarship (2022)**
- **International A-Level 3A*** (2020), equivalent to **99.8 ATAR**

REFERENCES

- Available on request