

ANDREW LIU

Melbourne, VIC | [LinkedIn](#) | [GitHub](#)

EDUCATION

Monash University

Bachelor of Computer Science

Melbourne, AUS

Ongoing

EXPERIENCE

Reinforcement Learning Engineer

Aug. 2026 – Present

Monash DeepNeuron

Melbourne, AUS

- Developed a MuJoCo + Gymnasium environment simulating granular material collection, transport and deposition with procedural randomisation
- Currently implementing a shared-policy MARL using MAPPO with centralised training and decentralised execution (CTDE)

Software Developer

Nov. 2025 – Present

Manga Reading Platform

Melbourne, AUS

- Built and deployed a full-stack manga reading platform with Next.js, including SSR, custom session authentication, ratings and comments
- Designed a PostgreSQL schema with RLS across 4 user roles and built a comprehensive admin dashboard for content management, user administration, analytics and audit logging

Selective Entry Tutor

Jul. 2025 – Present

Tutor

Melbourne, AUS

- Automated video and worksheet distribution, reducing weekly administrative workload from 2 hours to under 20 minutes
- Tutored secondary school students in mathematics for selective entry examinations

IT Support

Oct. 2023 – Feb. 2024

Highvale Secondary College

Melbourne, AUS

- Imaged and deployed 200+ student laptops, managing user accounts and Group Policy through Active Directory

PROJECTS

Optergy | TypeScript, Next.js, React, Tesseract OCR, SQLite

2026

- Built a web app that extracts annual energy consumption and energy star ratings from Australian appliance labels with OCR
- Calculated running costs using state electricity tariffs, and ranked efficient alternatives by purchase payback period
- Tuned image preprocessing and OCR page segmentation for faded, damaged and tilted labels

OddsSniper | TypeScript, Node.js

2026

- Created a tool that aggregates odds across Australian bookmakers to surface arbitrage opportunities and positive expected value (+EV) bets in AFL, NRL, and international sports markets
- Estimated fair probabilities by de-vigging sharp bookmaker prices and used them as an anchor to flag mispriced retail odds in real time

COMPETITIONS

3rd Place – Monash Collegiate Programming Competition (MCPC): Solved complex programming problems under time pressure.

2026

Finalist – Susquehanna Algothon: Developed an algorithmic trading strategy for a simulated market, placing top 10 out of 253 teams and 600+ participants.

2026

3rd Place – WattTheHack Hackathon: Built an appliance energy analysis tool and supply-demand algorithms for a simulated grid.

2026

2nd Place – Optiver Trade-a-thon: Monash trading challenge involving probability, logic and fair-value estimation under time pressure.

2026

EXTRACURRICULAR

Technical Events Officer

2026 – Present

The Faculty of Information Technology Society (WIRED)

Melbourne, AUS

- Led beginner-friendly technical workshops and facilitated discussions with industry representatives

TECHNICAL SKILLS

Languages: Python, TypeScript, Java, Haskell, SQL

Frameworks: PyTorch, FastAPI, React, Next.js, TailWind CSS, Express

Tools/Databases: Docker, Git, GitHub Actions, Postman, PostgreSQL, MongoDB, SQLite, Supabase, Windows Server