

THOMAS HAN

+61 4XX XXX XXX | thomas.han.cs@gmail.com | github.com/NotTacoz | linkedin.com/in/thomas-han1

Education

Curtin University

Perth, WA

B.Eng (Mechatronic)(Hons) & B.Sc (Computer Science) – WAM 87.25 (HD)

Expected Nov 2028

- **Curtin Excellence Scholarship; Coursework:** Fundamentals of Programming (**99%**), Electrical Systems (**96%**), Advanced Linear Algebra (**93%**), OOP, Probability & Statistics, Data Structures & Algorithms, Digital Systems

- **Societies:** UWA QFin Society (**Trading Team**), Curtin Quant Society (Vice President), ComSSA (Secretary)

Perth Modern School

Perth, WA

ATAR: 98.65 | WACE Certificate of Distinction | Engineers Australia Cert. of Excellence

2019 – 2024

Projects

Profet – TypeScript, Next.js, PostgreSQL, Socket.IO

2026

- Built a real-time supply chain risk platform in a **48-hour** hackathon; awarded **2nd Place (\$1,500 Prize)** at VisagioX and selected for their **5-week Pre-Accelerator**
- Modelled supply chains as directed graphs with real-time risk scenario propagation via Socket.IO, LLM-backed per-node risk assessments, and geospatial rendering with MapLibre GL

Pipe Navigation Robot (ComSSA Hackathon Winner, \$600) – Python

Nov 2025

- Won \$600 and “Most Pyrrhic” (**most technically ambitious**) prize from Microsoft and Deloitte judges; built a robot that autonomously navigated industrial pipe networks for maintenance inspection in a **48-hour** sprint
- Implemented A* path-planning with real-time obstacle avoidance to route through constrained pipe geometries; demonstrated functioning hardware prototype to judging panel

Bee Behaviour Simulation – Python, Pygame, NumPy

2025

- Built 2D ecosystem simulation where **500+** bee agents forage, scout, and return resources to a hive using Boids flocking for swarm movement and A* pathfinding for navigation
- Optimised neighbour lookups and collision detection via NumPy vectorisation, reducing per-frame interaction checks from $O(N^2)$ to $O(N)$; maintained **60+ FPS** with **hundreds of concurrent agents**

Startpage – Chrome Extension

2023 – Present

- Built and maintained open-source Chrome new-tab extension with **1.5M+** **lifetime API calls**; integrated live weather data, school timetable sync, and full theme and layout customisation

Experience

Optiver – Future Focus Program, Sydney

May 2026

- Selected for Future Focus, Optiver’s pre-penultimate program; attending the Sydney office in May for hands-on training in market making, options pricing, and trading technology
- **2nd Place**, Optiver Trade-a-thon: executed trades by calculating expected values from live market data and probabilistic outcomes in a high-pressure simulation hosted by Optiver’s trading team

UWA Quantitative Finance Society (QFin) – Trading Team Member

2026 – present

- Selected as **1 of 8** from 100+ applicants via technical & behavioural interviews
- Won QFin’s 4-week 24/7 RPS bot arena (teams of 2) by applying game theory and building bots using Markov chain prediction, opponent fingerprinting, Bayesian inference, and ensemble meta-learning against 20+ competing bots

Curtin Quant Society (CQS) – Vice President

2025 – 2026

- Spearheaded flagship events (Trade-a-thon, Quiz Night) and managed sponsor relationships with IMC and Optiver, facilitating internship pipelines and networking for members

ComSSA – Secretary & Tech Coordinator

2025 – 2026

- Secretary of a **2,000+** member CS society; built custom bots, ran events, and restructured the Discord server and event infrastructure

Additional

Languages & Web: C++, Python, JavaScript/TypeScript, SQL, React, Node.js, Firebase, Supabase

Libraries & Tools: NumPy, Pandas, Pygame, Docker, Git, Linux

Awards & Projects: 1st Place Amazing Tech Race (**\$400 Prize**) | 2nd Place Curtin Robotics Hackathon | Arcade Classics Ext. (**400k+** users)

Spoken Languages: English (Native), Mandarin (Conversational), Japanese (Conversational)