

Jerry Hong

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Education

University of New South Wales

Expected Graduation - 2026

Bachelor of **Advanced Computer Science**

- Weighted Average Mark: **90.33**
- **ICPC & Sydney Quant Traders Society** - Subcommittee
- **Training Lead** – UNSW DevSoc (Software Development Society), **Treasurer** – UNSW MechSoc
- Dean's Honor List, Scientia Scholarship Recipient

Cranbrook School

2017 – 2022

High School Certificate (**99.90 ATAR, 45/45 IB**) - **Top 50 in Australia**

- **Proxime Dux** & Senior Prefect & Scholarship Medal

Work Experience

Susquehanna International Group

September 2024

Quantitative Trading Discovery Day

- Developed **quantitative trading models**, **market-making strategies**, and **risk management techniques** through hands-on simulations and real-world problem-solving scenarios.
- Strengthened my data-driven problem solving skills, applying advanced **mathematical techniques** to optimize **trading and risk decisions**.

SafetyCulture

Nov 2024 – Present

Software Engineering Intern

- Built and optimized backend services with **Go**, implementing **gRPC endpoints** and streamlining deployment processes to improve performance and reliability.
- Collaborated with engineers, product designers, and managers in two-week sprints, ensuring smooth communication and on-time delivery of features.

University of New South Wales

May 2024 – Present

Tutor - (**Algorithms and Programming Techniques**)

- Taught advanced **algorithms** focusing on correctness and efficiency, covering topics in **dynamic programming**, **flow networks**, **greedy algorithms**, and **divide & conquer**, earning 100% positive student feedback.

Projects

Poker Solver (C++, Python, MATLAB, AI Algorithm)

- Applied **Monte Carlo Tree Search** in **C++** and **Python** to develop a probability prediction model for strategic decision-making in poker.
- Developed a **poker solver** using the **Counterfactual Regret Minimisation (CFR)** algorithm in **Python** to approximate **Nash Equilibrium**.
- Leveraged **MATLAB** to visualize **strategy charts**, enhancing interpretation and application of solver strategies.

Competitive Programming Experience (C++)

- Underwent 4 month bootcamp as part of a competitive programming course.
- Participated in ICPC, SPAR (South Pacific Algorithmic Rounds) and various other contests, **consistently achieving top 10% percentile**.

Fitmon - Fitness Social Media App (Express, Next.js, React, TypeScript, TailwindCSS, OpenAI API)

- Led development of a full-stack **React.js/Node.js** social media app for **exercise video sharing**, implementing **RESTful APIs** and **Redux** for state management.
- Designed a **scalable backend** with **Node.js** and **Express.js** for secure video storage and real-time video recording and streaming services.

Skills & Interests

Programming Languages: C++, Java, Go Python, JavaScript, TypeScript, C, PostgreSQL, gRPC

Languages: Fluent in Mandarin and English