

Jerry Hong

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Education

University of Pennsylvania - Exchange Student 2025
University of New South Wales *Expected Graduation - 2027*
Bachelor of Computer Science & Mechatronics Engineering

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

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 *Nov 2025 Start*
Incoming Software Development Intern
Optiver *April 2025*
FutureFocus - Technology Stream
TikTok *Feb 2025 - Presnet*
Backend Engineering Intern

- Developing **internal reporting system** through **asynchronous lambda machines** for live-streaming platform
- Scraping through **22 million active live-rooms** and generating reports in **mySQL** and using **gRPC** for internal messaging functionality.

SafetyCulture *Nov 2024 – Feb 2025*
Software Engineering Intern

- Engineered backend API endpoints using **Go, gRPC, Docker, and Kubernetes**, efficiently scaling up to **8000 page visits per hour**.
- Developed **customer-facing frontend** with **20,000 invocations per hour**, aided in addressing **80% of user inquiries**.

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**.

Skills & Interests

Programming Languages: C++, Java, Go Python, JavaScript, TypeScript, C, PostgreSQL, gRPC
Languages: Fluent in Mandarin and English