Justin Wei

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Education

Simon Fraser University — Burnaby, BC
Bachelor of Science in Computer Science — *Expected 2028*

- Relevant Coursework: Data Structures, Algorithms, Discrete Mathematics, Computer Systems

Technical Projects

Real-Time Arbitrage Platform | *Rust, Python, React, FastAPI, PostgreSQL* | arbot.app — October 2025 – Present

- Architected and deployed a full-stack arbitrage detection system processing real-time odds data across 11 sports from different prediction markets and sportsbooks
- Engineered a Rust-based matching engine using PyO3, reducing event-pairing latency by 30x compared to the original Python implementation
- Identifying 95+ daily arbitrage opportunities with 9% average edge, processing $6,400+ in daily volume
- Designed fuzzy matching algorithms with time-based correlation to accurately pair events across platforms with inconsistent naming conventions
- Implemented order book depth analysis to calculate liquidity-adjusted odds and filter opportunities by profitability thresholds
- Built responsive React dashboard with real-time updates, JWT authentication, role-based admin console, and automated Discord notifications

Crypto Escrow Web Application | *Go, React, LitecoinJS* — July 2025 – August 2025

- Developed a full-stack MVP enabling secure peer-to-peer trading on the Litecoin testnet with automated escrow settlement
- Implemented Go backend handling wallet generation, transaction signing, and conditional fund release upon trade confirmation
- Built React frontend with real-time transaction status updates and intuitive trading interface

Redis-Compatible Data Store | *Rust, TCP/WebSocket* — December 2025 – Present

- Developing a high-performance in-memory data store with Redis protocol compatibility to support real-time arbitrage detection infrastructure

Experience

Computing Instructor — October 2025 – Present
Chinese Language and Culture Institute (SD43) — *Coquitlam, BC*

- Instruct classes of 10-15 students in Python and Scratch programming fundamentals, developing curriculum focused on computational thinking and problem-solving
- Provide individualized mentorship and code reviews, helping students debug projects and understand core programming concepts
- Evaluate student progress through practical assessments, delivering constructive feedback to support skill development

Private Tutor — September 2021 – December 2024
Self-Employed — *Coquitlam, BC*

- Provided one-on-one tutoring in Calculus and Pre-calculus, adapting teaching methods to individual learning styles
- Collaborated with teachers and parents to track student progress, resulting in improved grades and comprehension

Technical Skills

Languages: Python, Go, TypeScript, Rust
Frameworks: React, Node.js, FastAPI, Express
Libraries: PyO3, Polars, NumPy, curl_cffi, Clerk
Developer Tools: Git, Docker, Linux, WebSockets, PostgreSQL, AWS, DigitalOcean