

Jennifer Liang

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Education

Harvard University

Cambridge, MA

A.B. IN APPLIED MATHEMATICS AND COMPUTER SCIENCE, GPA: 4.0/4.0

May 2023

- **Activities:** Women in Computer Science, Chinatown Citizenship, Harvard Crimson
- **Relevant Coursework:** Data Structures and Algorithms, Linear Algebra and Real Analysis, Multivariable Calculus, Probability, Statistics, Functional Programming, Machine Learning, Social Computational Choice, Optimization, Stochastic Processes
- **Awards:** Phi Beta Kappa, Detur Book Prize, John Harvard Scholar

Work Experience

Two Sigma

New York, NY

QUANTITATIVE SOFTWARE ENGINEER

Aug. 2023 – Present

- Engineer on the portfolio construction eng team, building production systems for portfolio construction and market impact measurement.
- Designed and implemented workflows to report execution slippage, enhancing monitoring and model feedback loops across trading desk.
- Used Python-based analysis framework to perform quantitative diff testing and validation of a major market impact model release to macro.
- Integrated high-frequency market data features into optimization and accounting models and coordinated release to production. Delivered performance optimizations that reduced computational overhead from 50% to <5%, improving execution efficiency and unblocking PnL.
- Driving the development of new platform to streamline release of new predictive features for market impact modeling via Python-based models.

Two Sigma

New York, NY

SOFTWARE ENGINEER INTERN

May 2022 – Aug. 2022

- Built an interactive React web app for visualizing yield curves, pricing fixed income instruments, and analyzing key rate risk.
- Developed a parallelized REST API for yield curve construction and calculation of key rate risk, deployed to production.
- Gathered requirements from researchers and stakeholders to refine functionality, ensuring the tool addressed trading and research needs.

Bloomberg

Toronto, ON

SOFTWARE ENGINEER INTERN

May 2021 – July 2021

- Added UI enhancements to the Angular-based Enterprise Console, a platform for configuring and monitoring real-time financial data feeds.
- Extended Python backend services to automate validation of 80,000+ FIX connections via new API endpoints

Mobile Innovations

Toronto, ON

SOFTWARE ENGINEERING INTERN

May 2020 – Aug. 2020

- Implemented a courier delivery API using Node.js and SQL, enabling reliable order tracking and delivery management.
- Built out testing utilities in CURL, Node.js, JavaScript, and Python to automate endpoint validation.
- Migrated legacy web app to React, refactoring codebase and developing reusable components to improve maintainability and performance.

Leadership & Projects

Arctic Reading Circle

Toronto, ON

FOUNDER

Jul. 2020 – Jan. 2024

- Founded a Canadian non-profit delivering online programs to promote literacy and learning among newcomer youth.
- Organized read-alouds and workshops that helped students build confidence, communication, and leadership skills.
- Established outreach partnerships with organizations including the Afghan Women's Organization and TDSB Newcomer Services.

Harvard Women in CS

Cambridge, MA

CO-DIRECTOR, GIRLS WHO CODE

Apr. 2020 – Apr. 2022

- Led weekly coding workshops for 30+ students covering Scratch, Java, Python, and HTML.
- Created mentorship opportunities through the WiCS Pen Pal Program, connecting high school students with Harvard CS mentors.

Skills

- Technical Language** Java, Python, C/C++, JavaScript, TypeScript, Node, React, SQL, OCaml, Swift, Angular, Claude
- Language** Native English, Conversational Mandarin and French
- Interests** Running, Fencing, Kickboxing, Reading, Skiing, Canada Learning Code, Zombies Run
- Olympiads** European Girls' Math Olympiad, Asian Pacific Math Olympiads, Canadian Open Math Challenge