

Michelle Liu

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EDUCATION

Brown University

Bachelor of Science, Applied Math – Computer Science, GPA: 4.00/4.00

Providence, RI

Sep 2021 – May 2025

- **Awards:** Kleiner Perkins Fellow, Robinhood Hackathon Bronze, AIME Qualifier, Rohn Truett Prize in Applied Mathematics

EXPERIENCE

Figma

Jun 2025 – Aug 2025

Software Engineer Intern

San Francisco, CA

- Developed custom stroke endcap sizing feature within Figma's Core Experience team, with **C++**, **React**, and **TypeScript**
- Engineered geometry and SceneGraph logic to enable precise, user-controlled cap sizes through vector math
- Collaborated with designers to iterate the stroke settings panel design, shaping the endcap controls and overall **UI/UX**

Lightspeed

Jan 2024 – May 2025

Data Science Intern

Providence, RI

- Developed a restaurant cohorting algorithm using LDAs to optimize menu pricing and drive revenue growth
- Analyzed over 10,000 transactions using BigQuery to uncover sales patterns during holidays, informing restaurant strategy
- Developed sales and tip trend analyses using **Google Cloud Platform** Dataform and **SQL**, with Looker for strategic planning
- Led initiative to optimize table pacing, leveraging statistical models (**scikit-learn**, **pandas**) for over 5,000 restaurants

Susquehanna International Group

Jun 2024 – Aug 2024

Quantitative Trading Intern

New York, NY

- Modeled the impact of attention effects on stock price volatility leading up to earnings reports and events using Python, applying **time series analysis** and statistical testing
- Executed real-time trading strategies and risk management in simulated **electronic mock trading** sessions

Brown University

Aug 2022 – Dec 2023

Undergraduate Teaching Assistant

Providence, RI

- Assisted over 300 students and designed over 10 assignments for **NLP**, statistics, and **machine learning** courses

JPMorgan Chase & Co.

Jun 2023 – Aug 2023

Software Engineer Intern

Jersey City, NJ

- Built a data pipeline using **Splunk** and **AWS** to extract and preprocess call center log data, improving data accessibility and analytics efficiency for over 50,000 users
- Implemented outlier detection and classification models, achieving over 90% accuracy in identifying irregular calls
- Created time series models to find trends in problematic calls across various regions, supporting over 10,000 call specialists

Western Digital

May 2022 – Aug 2022

Software Development Engineer Intern

Milpitas, CA

- Designed test prioritization algorithm using **Python** and **machine learning**, increasing test cycle efficiency by over 50%
- Constructed regression, random forest, **XGBoost**, and neural network models to predict test failures with 95% accuracy

PROJECTS

Jreamboard | React, Node.js, JavaScript, Express 🔄

- Developed a podcast and audio-based social media web application for the Jream Foundation
- Prototyped frontend using **Figma** and implemented UI using **React**, designing a login and audio posts page
- Built backend architecture with **Express** and **PostgreSQL** to store audio and account information

IntelliGin | Python 🔄 🌐

- Developed a Double DQN (Deep Q-Network) reinforcement learning model for Gin Rummy, employing experience replay, self-play and adversarial strategies, achieving performance on par with rule-based adversaries and random agents
- Implemented custom environment in RLCard for Gin Rummy, including engineered feature extraction

Caching I/O | C

- Designed caching system for file reading and writing, achieving 31% faster performance than C's standard library

North Burial Ground | R, HTML/CSS, Adobe Illustrator 🌐

- Partnered with Providence government to publish historical burial trends at historic cemetery using **ggplot2** and Illustrator

SKILLS

Languages: Python (proficient); C, C++, SQL, JavaScript, TypeScript, HTML/CSS (intermediate); R, MATLAB (novice)

Frameworks & Tools: React, TensorFlow, PyTorch, Git, Docker, Google Cloud Platform, Amazon Web Services, Microsoft Office