JASON LU

EDUCATION

NORTHWESTERN UNIVERSITY

EVANSTON, IL

Combined B.S./M.S. In Computer Science, Data Science and Engineering Minor, GPA: 3.72/4.00

September 2021 - June 2025

- Coursework: C/C++ Programming, Data Structures and Algorithms, Machine Learning, Generative Methods, Database Management
- Activities: Northwestern Financial Technologies Club (Interim President), Society of Asian Scientists and Engineers (Head of Events)

EXPERIENCE

NORTHWESTERN FINANCIAL TECHNOLOGIES CLUB

EVANSTON, IL

INTERIM PRESIDENT, TECHNICAL LEAD

March 2022 - Present

- Served as leadership to 6+ technical teams to coordinate development of a multifaceted quantitative trading platform from scratch
- Spearheaded infrastructure development by assigning deadlines and conducting code reviews to boost work efficiency of project teams
- Established workflows for information management team and organized weekly meetings for 10+ developers to track code progression
- Lead entirety of organization recruitment and event planning for fall quarter of 2022 attracting over 275 student researchers and developers

THE GARAGE EVANSTON, IL

COMPUTER CONSULTING AIDE

October 2021 – June 2022

- Instructed students and faculty on operation of commercial VR/AR platforms to support various technology startups and courses
- · Supervised 3D printing, laser cutting, and electronic equipment usage to promote rapid prototyping for product-focused startups
- Operated suite of AV equipment to support weekly entrepreneurial and workshop events for Garage residents

PROJECTS

QUANTITATIVE TRADING FIRM | Python, Multiprocessing, Asyncio, Jenkins, Docker

March 2022 - Present

- · Documented and wrote storage paradigms using Python multiprocessing for 5+ crypto-currency data streams to analyze market trends
- Converted data from WebSocket streams into JSON format for simplified visualization and variable time storage in AWS S3 Glacier
- Integrated and developed command line interface to improve cross-team functionality and optimize requisite data querying
- Implemented CI/CD pipeline using Jenkins to add layers of failure redundancy when project developers deploy onto physical host server

STOCK EXCHANGE INTERFACE | React.js, TypeScript, Next.js, Tailwind

August 2022

- Built front-end trading interface for Northwestern University Stock Exchange, a full exchange and market simulation with RESTful API,
 WebSocket feed, and brokerage site to facilitate high volume stock market trading contests.
- Streamed stochastic engine data using RESTful API and React Hooks to display simulation market data in real-time data grids
- Designed data visualizations in Figma and integrated candlestick charts using React.js function components to facilitate click trading

LC LEADERBOARD | React.js, JavaScript, Next.js, GraphQL

July 2022

- Developed custom Leetcode statistics tracker for Northwestern's Financial Technology Club to boost intrinsic motivation of club developers
- Calculated and statically rendered ranking of members using GraphQL queries to Leetcode API to pull and display user statistics
- Deployed leaderboard with Vercel and GitHub to create CI/CD pipeline for streamlined feature integration and delivery

PAC-MAN++ | C++, Git, GitHub, UNIX Shell

May 2022

- Constructed Pac-Man game from scratch using subset engine of SDL2 in C++ dev environment with Git version control
- Built user-interactive GUI using Model-View-Controller architectural pattern to enable player-driven gameplay
- · Designed multi-level progression system with custom sprites, 2D hitboxes, event handlers, and conclusive unit-testing

WEB PORTFOLIO (lujason.com) | HTML, CSS, JavaScript, Markdown, Jekyll, Git

Dec 2021 - Present

- Produced personalized HTML, CSS, and JavaScript snippets to host technical projects and applications on the web as digital portfolio
- Employed simple static web hosting using Jekyll and GitHub pages to optimize site accessibility and ease of deployment
- · Optimized cross-compatibility of digital portfolio using CSS media queries to ensure similar user experience across multiple devices

TECHNICAL SKILLS

Programming Languages · Python, Java, C, C++, JavaScript, Typescript, Racket, SASS, HTML, CSS, SQL

 $\textbf{Technologies} \quad \text{Git, React.js, Next.js, Firebase, Tailwind, NodeJS, MATLAB, UNIX Shell, GitHub, Figma, MySQL, Jekyll, Docker, Jenkins, WebSocket \\$