Jason Yi

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EDUCATION

University of North Carolina at Chapel Hill   Chapel Hill, NC

Bachelor of Science in Computer Science, Statistics and Analytics $\sim$ GPA: 3.51/4.00   *Aug. 2022 – May 2026*

- **Coursework**: Operating Systems, Machine Learning, Algorithms, Data Structures, Databases, Foundations of Programming, Probability for Data Science, Discrete Mathematics, Linear Algebra, Calculus III

Alamance Community College   Graham, NC

Associates in Science $\sim$ GPA: 3.85/4.00   *Aug. 2021 – May 2022*

TECHNICAL SKILLS

Languages: C/C++, Java, Python, TypeScript, JavaScript, HTML/CSS, Assembly, Swift/SwiftUI
Frameworks/Libraries: React.js, GraphQL, Angular, Node.js, PostgreSQL, NumPy, Pandas, Matplotlib, JUnit
Developer Tools: VSCode, Git, GitHub, Vim, Jira, Jenkins, Splunk, IntelliJ, Linux Kernel, AWS, XCode

EXPERIENCE

Fidelity Investments   June 2024 - Present

Full Stack Software Engineer Intern   *Durham, NC*

- Developed Backend services in **GraphQL** via **Experience API** for Account Opening which impacts **50+ million users**, and Frontend services in **Angular and TypeScript** for Crypto IRA
- Implemented customer eligibility to prevent insufficient crypto transactions using **TypeScript and GraphQL** by gathering details from downstream multiple APIs and mapping transfer eligibility to customer eligibility
- Established excellent code quality and performance through unit testing via **Mocha, Splunk, and NestJS**

Outlier   April 2024 - June 2024

AI Trainer/Code Reviewer   *Remote*

- Proficiently trained and prompt-engineered large language models, utilizing data analysis libraries such as **Pandas, NumPy, and Matplotlib**, alongside **PyTorch** and **Scikit-learn** frameworks
- Provided thorough evaluations of AI-generated code outputs against benchmarks, user feedback, performance metrics, and insights gained from Reinforcement Learning from Human Feedback (RLHF)
- Collaborated with teams to integrate feedback loops for iterative refinement of AI-generated outputs in **Python**

UNC Computer Science Department   Aug. 2023 – May 2024

Data Structures Undergraduate Teaching Assistant   *Chapel Hill, NC*

- Managed office hours schedule with 20 TAs and related communications with **250+ students** on Piazza
- Assisted with grading **50+ students'** coding assignments in **Java**, comprehension questions, and exams
- Hosted weekly in-person office hours for **15+ students** for assignment aid and exam review

PROJECTS

Distributed Stock Exchange | *C++, FIX/FAST, FastDDS, MySQL, TCP/IP, Distributed Systems, Linux*

- Engineered **FIX/FAST** protocol based high frequency C++ **stock exchange**, load-balancing over 3 matching engine nodes, supporting **1,000,000+** order insert request and transactions **per second**
- Supports **market/limit/stop order** matching through **Price-Time Priority**; built gateway node for **TCP/IP** request authentication/authorization from **MySQL** database; used **FastDDS** for inter-node communication
- Designed and integrated custom thread-safe optimized data structures (**priority queues, hash maps**) and utilized **GNU** profiling techniques for optimizing insert latency by **100x** from initial speeds

Restaurant-Finder | *PostgreSQL, Express.js, React.js, Node.js (PERN Stack)*

- Developed a **full-stack website** for Creating, Retrieving, Updating, and Deleting restaurants and reviews
- Maximized data efficiency by **utilizing dual Postgres tables** for managing restaurant and review data
- Improved component data retrieval to automatic and minimized prop drilling by **utilizing Context API**

Twittermenti | *Swift, CreateML, Twift, Twitter API*

- Developed a model that displays the **sentiment** of a given Twitter handle via emoji by filtering the top 100 tweets
- Achieved **96% accuracy rate** in classifying tweets into positive, negative, or neutral sentiments using CreateML
- Integrated Twift for direct access to Twitter's API to query English-labeled tweets using **async methods**