Jie (Jason) Ji

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EDUCATION

University of California, Berkeley

05/2025

Master of Engineering – Electrical Engineering and Computer Science (EECS)

GPA: 4.0/4.0

Related Coursework: Data Structures and Algorithms, Machine Learning, Computer Architecture, Computer Networking, Database System, Data Mining, NLP, Agentic LLMs, Artificial Intelligence, Data Science, Systems Programming, Linear Optimization.

Emory University, Goizueta Business School

05/2024

BS in Computer Science, BBA in Information Systems and Operations Management

WORK EXPERIENCES

Raymond James Financial

St.Petersburg, FL

GPA: 3.9/4.0

Software Engineer Intern

05/2024 - 08/2024

- Designed and implemented wealth management applications backend filtering algorithm using **Java**, which was deployed to production for 15,000+ financial advisors (FA) with zero reported errors.
- Developed frontend features using **Angular (TypeScript)**, contributed to the migration of the codebase from **AngularJS** to **Angular**, and fixed critical production bugs through code reviews to increase portal click rate by 24%.
- Implemented an optimized **ETL** pipeline in **Oracle Database** to integrate over 236,000 FA data entries from 6 different data sources, achieving a 40% reduction in runtime through **SQL query optimization** and efficient data transformation.
- Deployed **Logistic Regression**, **Random Forest** and **XGBoost** to segment FAs into peer groups, achieving a 78% AUC score when predicting 822 FAs with asset growth rate exceeding 5% and pinpointing 10+ actionable insights to increase FA asset growth.

Pony.ai Fremont, CA

Software Engineer Intern

05/2022 - 08/2022

- Developed an algorithm (C++) using a **Support Vector Machine** to accurately classify unknown obstacles detected by autonomous vehicles (AV), resulting in optimization in road map accuracy across 200+ areas and was used by all AVs in CA for navigation.
- Collaborated with 3 interns to engineer 2 comprehensive **unit tests** for road graphs that the AV relies on using **Git** and **Jenkins**.
- The unit tests identified 150+ problematic stop lines, fixing the safety issue of AVs stopping prematurely at intersections.
- Leveraged data processing and **clustering algorithm** such as **DBSCAN** to optimize vehicle movement data processing time by 30%.

StudyFindSoftware Developer Intern

Atlanta, GA 04/2021 – 01/2022

Developed 15+ standardized React.js components, using React Router and Redux to handle routing & application state.

- Redesigned and deployed the startup's team webpage (**TypeScript**) using **A/B testing**, showcasing the profiles of 30+ team members.
- Developed a web crawler (**Python**) to efficiently mine over 10,000 federal clinical trial data, optimizing data collection processes.
- Implemented an automated email marketing tool (Python), successfully driving product sales to over 1,100 researchers nationwide.

Emory Entrepreneurship & Venture Management

Atlanta, GA

Software Developer

- 02/2021 11/2021
- Spearheaded a team of five in **Agile** for the **full stack** development (UI/UX, front end, back end) of the <u>HackATL2021 official website</u>.
- The website of HackATL2021 attracted 400 applicants from 102 colleges in the US, representing a 180% increase in sign-up.

SELECTED PROJECTS

Teki-drive – [Python, React.js, RESTful APIs, Flask, Firebase, JSX, HTML&CSS]

- Developed a web application to help streamline task management, using **CI/CD pipelines** for rapid and reliable deployment.
- Architected Flask backend APIs for page navigation, GET and POST requests, and efficient data retrieval and storage mechanisms.
- Established front end using **React.js** and **JSX**, building features like login, profile management, user invitations, and task generation.
- Integrated and prompt engineered **OpenAI LLM** to power the app's backend for code completion and agile task management.

Vote Vault – [TypeScript, React Native, RESTful APIs, Express.js]

- Co-founded and built a mobile app (**React Native & TypeScript**), enabling user easily access and navigate local voting information.
- Led a five-person team in an **Agile/Scrum** framework, delivering a product that was acclaimed by a **Georgia house representative**.
- Deployed Browser Automation (Selenium) and incorporated RESTful APIs (Google Civic API) to build a local election database.

Chat App – [JavaScript, React, CSS&HTML, Firebase]

- Engineered a chat room for real-time communication using React. is for frontend development of responsive and interactive UI.
- Employed Firebase as backend database to ensure secure and reliable data storage for user messages and account profile.
- Implemented a robust security layer by incorporating 10+ message filtering security rules within Firebase to enhance user privacy.

PROGRAMMING SKILLS

Coding Languages: Python, Java, JavaScript/TypeScript, SQL, C++, C, HTML&CSS.

Frameworks/Tools: Git, Linux, Vim, Flask, RESTful API, Node.js, React.js, Redux, React Native, Angular, Express.js, JSX, JSON, OOP, Relational Database, Jenkins, Jira, Kafka, Firebase, Google Cloud Platform (GCP), MySQL, Oracle, AWS, Confluence, Agile. Libraries: PyTorch, Scikit-learn, NumPy, Pandas, Matplotlib, Seaborn, BeautifulSoup4, NetworkX, Selenium.