Leon Liu

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EDUCATION

University of California, Berkeley

Bachelor of Science - Electrical Engineering and Computer Science

December 2022

Certificate of Entrepreneurship and Technology

Relevant Courses: Database Systems, Internet Architecture & Networking, Computer Security, Data Structures, Algorithms, Software Engineering, Machine Structures, Discrete Math & Probability Theory, Data Science Foundations

EXPERIENCE

Siemens Healthineers

Palo Alto, CA

Software Development Engineer

February 2023 - Present

- Developed a Python-based automation framework using Playwright for web and Pywinauto for Windows desktop.
- Unified logging across distributed platforms using Syslog, improving traceability and reducing debugging time.
- Implemented a BERT-based code retrieval chatbot, improving code discovery speed for automation developers.
- Lead development of an LLM-driven automation script generator trained on internal domain-specific code.

Nesh (Startup) Houston, TX

Machine Learning Software Engineer Intern

April 2022 - August 2022

- Built cascading interfaces across microservices using REST to streamline data flow and improve communication.
- Optimized document ranking by integrating image heuristics, improving targeted search relevance by 70%.
- Deployed quantized NLP models, accelerating inference speeds by 200% on CPU-based production systems.
- Fine-tuned and deployed a cross-encoder ranking model, reducing average search ranking error by 34%.

Rocket Mortgage Detroit, MI

Machine Learning Intern

May 2021 - August 2021

- Developed predictive models using scikit-learn to correlate chat bot satisfaction scores with user demographics.
- Created a topic ranking model to determine priority for automated messaging during client calls.
- Built an NLP sentiment analysis model using BERT and the survey data that was gathered from phone calls.

Berkeley/NASA Autonomous Vehicle Research

Berkeley, CA

President

September 2020 - June 2021

- Led a 30-person cross-functional team in developing autonomous vehicle tech for NASA astronaut rescue missions.
- Secured \$2.000 sponsorship from Cadence and received an endorsement from the Dean at College of Engineering.
- Directed fundraising, electrical design, and software integration, successfully advancing prototype development.

Projects

Present **Fyts**

- Building a personal styling app with AI-driven outfit recommendations based on body type, weather, and events.
- Includes wardrobe organization and a social platform for users to connect, share outfits, and explore inspiration.

Job Hunter

- Built a Chrome extension using React and FastAPI to track job applications and deliver AI-driven insights
- Integrated Gmail, Google Sheets, and CrewAI; features include mock interviews, resume analysis.

Tile Heights December 2024

• Built a full-stack e-commerce platform with an admin page using Next.js, Google OAuth, MongoDB.

SKILLS

- Frameworks & Tools: FastAPI, MongoDB, PostgreSQL, CrewAI, SQLite, Playwright
- Machine Learning: CrewAI, BERT, LLM, Scikit-Learn, NLP
- DevOps & Cloud: Docker, AWS EC2, Vercel, CI/CD (Jenkins, GitHub Actions)
- Languages: Python, Java, SQL, C, C++, C, TypeScript, Next.js, Node.js, React/Native, Tailwind