

# Leon Liu

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## EDUCATION

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### 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

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### Siemens Healthineers

*Software Development Engineer*

Palo Alto, CA

*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)

*Machine Learning Software Engineer Intern*

Houston, TX

*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

*Machine Learning Intern*

Detroit, MI

*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

*President*

Berkeley, CA

*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

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### Fyts

Present

- 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

Present

- 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

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