

# Minyi (Naomi) Liu

Portfolio site: <https://naomisportfolio.vercel.app/>

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## EDUCATION

University of California, Berkeley (Senior Standing)

2022 - 2025

*Bachelor of Art in Computer Science*

- GPA: 3.94/4.0
- Related coursework (A or A+): The Structure and Interpretation of Computer Programs, Data Structures, Computer Architecture, Introduction to Machine Learning.

## TECHNICAL SKILLS

**Programming Languages:** Python, Java, C, HTML/CSS, SQL, JavaScript, Scheme

**Tools/Technologies:** Django, RESTful API, Pandas, OpenCV, PyTorch, Scikit-learn, LangChain, Linux, Kubernetes, Docker, Helm, AWS, Arduino, NumPy, GitHub, Selenium, IntelliJ, React, Next.js, Bootstrap, Framer Motion

## EXPERIENCES & PROJECTS

### **SRE Intern**

Tencent Holdings Ltd | Shenzhen | *May. 2024 – Aug. 2024*

- Designed and implemented a cloud hosting O&M system using **Django** and **Vue**. Functions include host information pulling and querying, host file querying and backup, backup record querying, as well as tracking and visualizing website operation and development metrics.
- Developed an AI Assistant SaaS with **streaming** dialog interface using **DRF** and **LangChain**.
- **Fine-tuned** LLM to increase output accuracy and stability for **PromQL generation** and enabled **user guidance** by implementing complex **pipelines**, **prompt engineering**, and **memory management**.
- Deployed SaaS using **Helm** charts and **Kubernetes** ensures efficient and stable service operation.
- Use **DevContainer** and **Dockerfile** to standardize the project development environment, making the establishment of the development environment more concise and efficient.

### **Software Engineer**

Plant Gene Expression Center, Professor Jennifer Lewis's Lab | Albany | *Sep. 2023 – Dec. 2023*

- Designed and constructed an innovative sideview camera system, utilizing **Raspberry Pi** and camera module IMX219.
- Developed **automated testing script** to fine-tune system parameters, ensuring high-resolution and accurate image capturing.
- Devised an image processing system using **OpenCV** to preprocess and analyze raw image data.
- Developed algorithms capable of identifying plant immune responses using **PyTorch** and **Scikit-learn**.

### **Software Engineer For Club Project**

QuanTech Quantitative Financing Software | Berkeley | *May. 2023 – Aug. 2023*

- Developed a robust continuous data retrieval system and interactive trading models visualization, leveraging **JFreeChart**, **Java Swing**, **AWT**, and the Interactive Brokers API to enhance trading decision-making processes.
- Designed and implemented high-efficiency **data structures** specifically tailored for optimizing the storage and retrieval of stock information, significantly improving system performance and scalability.

### **Freelance Full-Stack Engineer**

Zhou Shen's Fanclub | online | *Dec. 2021 – May. 2022*

- Identified and understood the client's challenges in arranging the reward system for a large organization, and proposed a membership management website as solution
- Guided the group to conduct Agile practices by breaking down project into smaller features and encouraging regular feedback from client.
- Developed Reward Points Balance Tracking feature using **HTML**, **CSS**, **Django** and **MySQL**.
- Implemented features such as **membership rewards redemption**, **points expiration system**, **lottery system**, and **web admins system**.
- Achieved average daily visits 1800+, 100000+ data in database, 15000+ users.