

Minyi (Naomi) Liu

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

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EDUCATION

University of California, Berkeley (Junior Standing)

2022 - 2026

Bachelor of Art in Computer Science

- GPA: 3.9/4.0
- Related coursework (A or A+): The Structure and Interpretation of Computer Programs, Data Structures, Computer Architecture, Designing Information Devices and Systems I&II

TECHNICAL SKILLS

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

Tools/Technologies: Pandas, OpenCV, PyTorch, Scikit-learn, Linux, Arduino, Django, NumPy, GitHub, Appium, Selenium, IntelliJ, React, Next.js, Bootstrap, Framer Motion

EXPERIENCES & PROJECTS

Software Engineer

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

- Spearheaded the design of an innovative sideview camera system, utilizing **Raspberry Pi** and camera module IMX219.
- Developed **automated testing script** to fine-tune system parameters to ensure high-resolution and accurate image capturing.
- Devised an image processing system using **OpenCV** to preprocess and analyze raw image data.
- Incorporated machine learning techniques with **PyTorch** and **Scikit-learn** to develop algorithms capable of identifying plant immune responses.

Software Engineer For Club Project

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

- Engineered 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.
- Crafted and executed an **object-oriented program** framework, facilitating seamless interactions with stock objects and enabling flexible integration of new trading models and strategies.

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
- Lead the group to conduct Agile practices by breaking down project into smaller features and encouraging regular feedback for client.
- Developed Reward Points Balance Tracking feature using **HTML**, **CSS**, **Django** and **MySQL**.
- Spearheaded the development of features such as **membership rewards redemption**, **points expiration system**, **lottery system**, and **web admins system**.
- Average daily visits 1800+, 100000+ data in database, 15000+ users.

Freelance Automation Script Developer

Zhou Shen's Fanclub | online | *Feb. 2020 – May. 2020*

- Designed and developed automation script using **Selenium** and **Appium** to access and operate webpage and App on Android virtual machine.
 - Include features such as: opening specific page or App, logging in, identifying captcha using API, commenting/reposting random text, imitating human behavior by tapping and swiping, inputting text, find element by various way, voting, etc.