Minyi (Naomi) Liu

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



EDUCATION

University of California, Berkeley

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

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.
- Orchestrated iterative testing phases to fine-tune system parameters to ensure high-resolution and accurate image capturing.
- Upgraded the system to introduce mobility to the camera, enabling comprehensive imaging from various angles and enhancing the depth of plant analysis.
- 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

- Developed continuous data retrieving system and data visualizing system using Java and Interactive Brokers API
- Implemented and Visualized trading models using JFree, Java Swing, and AWT

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 Webdriver** to access and operate webpage.
 - o Include features such as: opening specific Weibo webpage, logging in, identifying captcha using API, commenting/reposting random text, posting announcements until a specific account posted a new blog, etc.
- Developed automation script using Appium and Selenium to operate App on Android virtual machine.
 - o Include features such as: opening specific App, logging in and logging out, imitating human behavior by tapping and swiping, inputting text, find element by various way, voting, etc.

TECHNICAL SKILLS

Programming Languages: Python, Java, C, HTML, MySQL, JavaScript, Scheme

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