

# Vivian Liu

[v6liu@ucsd.edu](mailto:v6liu@ucsd.edu) | [GitHub](#) | [LinkedIn](#) | [Portfolio Website](#)

---

## EDUCATION

**University of California, San Diego**

Sep 2022 – Dec 2025 (expected)

**B.S. Computer Science, Minor in Finance** – 4.0 GPA (Provost Honors)

**Coursework:** Honors Linear Algebra, Statistics, Data Structures, Systems Programming, Deep Learning

**Skills:** Java, C, GDB, ARM Assembly, Python, Git, R, LaTeX

## EXPERIENCE

**UC San Diego**

La Jolla, CA

*Computer Science Tutor – Java, C, ARM Assembly, communication*

Apr 2023 – Present

- Collaborate with **26** tutors to develop quizzes and assignments for **275+** students each academic quarter
- Host **50+** tutor hours quarterly to facilitate understanding of data structures and systems programming
- Attend lectures to clarify technical concepts such as objects, classes, algorithms, and memory models

**Triton Software Engineering**

La Jolla, CA

*VP Operations – budgeting, event planning, communication, time management*

Feb 2023 – Present

- Manage 4 funding sources accumulating to **\$12,000+** annually for organization events and operations
- Organize and coordinate **100+** meetings, social events, and workshops quarterly for **90+** members
- Spearhead recruitment and direct marketing, reaching a diverse audience of **1,600+** students

*Developer ([GitHub](#)) – TypeScript, React Native, Next.js, Firebase, Figma*

Nov 2022 – Jun 2023

- Collaborated with **13** members in an Agile workflow to develop an agriculture transportation business platform with the nonprofit Laktaa Bhutan to address poor transportation infrastructure
- Coded a mobile application with React Native that allows users to sign up and search for delivery jobs
- Integrated Firebase authentication into a Next.js administrative portal to streamline account creation

**ACM at UC San Diego**

La Jolla, CA

*Automation Developer ([GitHub](#)) – TypeScript, discord.js, Figma*

Dec 2022 – Present

- Utilized the easyqrcoodejs-nodejs package to code a Discord bot automating creation of event QR codes
- Upgrade bots from discord.js v13 to v14, ensuring seamless functionality for **4,000+** server members
- Maintain pipelines to assist Events team with hosting **250+** events, workshops, and socials

**Yonder Dynamics**

La Jolla, CA

*Software Developer ([GitLab](#)) – Python, OpenCV, ROS*

Oct 2022 – Mar 2023

- Helped engineer a Mars Rover to complete autonomous navigation in the University Rover Challenge
- Leveraged ROS and OpenCV in Python to detect ArUco markers with computer vision
- Implemented a complementary filter that takes in gyroscope and accelerometer data to track orientation

**Lockheed Martin**

Remote

*Code Quest Intern – Java, Python*

Jun 2021 – Sep 2021

- Developed and tested coding problems using Java and Python for upcoming Code Quest competitions
- Co-hosted a Women in Computer Science coding competition for **30+** college interns
- Modified the Contact Us page on the [Code Quest Academy](#) site to enhance UI/UX by rewriting CSS

## PROJECTS

**Green Guide ([GitHub](#))** – JavaScript, React, Firebase

Apr 2023

- Led a group of 4 to build a sustainability web app with React and Firebase authentication at LA Hacks

**Update Grad Date Automator ([GitHub](#))** – Python, Google Sheets API

Jul 2023

- Created Python script using Google Sheets API to automate updating graduation dates **6** times a year for **90+** members on a club roster, improving efficiency and ensuring accurate data management

**Finance Tracker Website ([GitHub](#))** – React, Express, MongoDB

Oct 2022 – Nov 2022

- Programmed a full-stack web app utilizing the MERN stack that helps users track finances

**Portfolio Website ([GitHub](#))** – TypeScript, Next.js, Figma

Jun 2023 – Present

- Designed and hand coded a [portfolio website](#) with Next.js 13 using the latest App Router