

# Vivian Liu

[v6liu@ucsd.edu](mailto:v6liu@ucsd.edu) | [github.com/Stuart6557](https://github.com/Stuart6557) | [linkedin.com/in/vivianliu532](https://linkedin.com/in/vivianliu532)

---

## EDUCATION

**University of California, San Diego**

Expected Graduation: Dec 2025

**B.S. Computer Science, Minor in Finance** – 4.0 GPA (Provost Honors x4)

**Coursework:** Honors Linear Algebra, Computer Architecture, Software Engineering, Deep Learning, Recommender Systems, Data Structures, Algorithms, Discrete Math, Statistics, Game Theory

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

## EXPERIENCE

**UC San Diego System Energy Efficiency Lab**

La Jolla, CA

*Machine Learning, Computer Architecture, and Bioinformatics Researcher*

Sep 2023 – Present

- Authored an 8 page proposal formulating hyperdimensional computing ML algorithms and near data processing architecture techniques to accelerate genome assembly from millions of DNA fragments
- Presented topics such as de Bruijn graphs, bloom filters, and rolling hashes to a class of 50+ students
- Briefed progress to 30+ undergrad and grad students, postdocs, and professors in weekly meetings

**ACM at UC San Diego**

La Jolla, CA

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

Dec 2022 – Present

- Utilized various npm packages to rewrite a Discord bot automating creation of event checkin QR codes
- Upgraded bots from discord.js v13 to v14, ensuring seamless functionality for 4,000+ server members
- Maintained pipelines and bot deployments to support a 100+ member board with hosting 250+ events
- Coded a Chrome extension that assists Events Team in autofilling forms with data fetched from Notion

**Triton Software Engineering**

La Jolla, CA

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

Nov 2022 – Jun 2023

- Collaborated with 13 members in an Agile workflow to develop an agriculture transportation platform
- Coded 5 screens in a mobile app that allows users to create, search for, and apply to delivery jobs
- Integrated Firebase authentication into a Next.js administrative portal to streamline account creation

**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 with 25+ problems for 30+ interns
- Modified the Contact Us page on the [Code Quest Academy](#) site to enhance UI/UX by rewriting CSS

## LEADERSHIP

**UC San Diego Computer Science and Engineering**

La Jolla, CA

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

Apr 2023 – Present

- Hosted 100+ tutor hours to facilitate understanding of data structures and systems programming
- Taught technical concepts such as SSH, classes, objects, algorithms, pointers, and memory models
- Collaborated with 35+ tutors to administer quizzes and assignments for 600+ students each quarter

**Triton Software Engineering**

La Jolla, CA

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

Feb 2023 – Present

- Managed 4 funding sources accumulating to \$12,000+ annually for organization events and operations
- Organized and coordinated 100+ meetings, social events, and workshops quarterly for 90+ members
- Spearheaded recruitment and marketing, increasing outreach by 500%+ and applications by 65%+

## PROJECTS

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

Apr 2023

- Led a group of 4 as an engineering manager at LA Hacks to build a sustainability web app featuring Firebase user authentication, a waste sorting guide, a card matching game, and a recycling tracker
- Managed project lifecycle by setting up the repo, assigning issues, and teaching team members React

**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