Vivian Liu

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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*
- Hosted 50+ tutor hours to facilitate understanding of data structures and systems programming
- Collaborated with 26 tutors to create quizzes and assignments for 275+ students each academic quarter
- Attended 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*
- 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 directed 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 easyqrcodejs-nodejs package to code a Discord bot automating creation of event QR codes
- Upgraded bots from discord.js v13 to v14, ensuring seamless functionality for 4,000+ server members
- Maintained software 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