# 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**

# **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 (<u>GitHub</u>) – 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 (<u>GitHub</u>) - TypeScript, discord.js, Figma, AWS

Dec 2022 - Present

- Utilized the easyqrcodejs-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

#### 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

# 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

Nov 2022

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

### ACM Past Events Display (CodeSandbox) - React

Mar 2023

• Built a web page that fetches and displays 750+ past ACM events and features a search functionality