

EDUCATION

University of California, San Diego

B.S. in Computer Science, 3.6/4.0 GPA

Aug. 2024 – Present

San Diego, CA

- **Coursework:** Data Structures & Algorithms, Object-Oriented Programming, Computer Organization, Design of Algorithms

PROJECTS

Market Earnings & Predictor | *Python, NumPy, FastAPI, Dolt, Next.js*

Feb. 2026 - Present

- Built a financial data platform processing earnings data for **4,000+** public companies, integrating multiple APIs.
- Developed REST API endpoints using FastAPI to collect, normalize, and serve large structured datasets.
- Designed optimized SQL queries, reducing response times and handling **thousands of records per request**.
- Built a dynamic Next.js frontend consuming backend APIs to visualize financial insights.
- Implemented a NumPy-based ML pipeline analyzing OHLCV time series data to predict next-day closing prices.

System Emulator | *C++, SDL3*

Sept. 2025

- Implemented a cycle-accurate **500+** opcode emulator core with decode, fetch, and an execution pipeline.
- Designed low-level CPU and memory simulation architecture modeling Game Boy hardware behavior.
- Validated correct behavior using test ROMs and opcode traces.
- Built a real-time graphical output system using **SDL3** supporting hardware-accurate rendering and input.

Restaurant Website | *TypeScript, React, Express, Node.js*

Jul. 2025

- Designed and implemented responsive front-end layout for a restaurant website.
- Implemented core site architecture, page routing, and reusable UI components.
- Integrated menu and content structure for dynamic updates.

EXPERIENCE

Software Engineering Intern

Jan. 2026 – Present

ACM @ UC San Diego

San Diego, CA

- Developing full-stack **MERN** web application for Peaks and Professors (UCSD chapter).
- Engineering **RESTful APIs** to manage event data and dynamic content across the application.
- Building responsive, modular React components for features including events calendar and spotlight pages.
- Collaborating in a **6-person team** using Git and code reviews to deliver maintainable code.

Lead Builder

Nov. 2022 – Mar. 2024

Scottie Subs (AUVSI Robosub 2023)

San Diego, CA

- Constructed an autonomous submarine for **international competition** and testing against **30+ teams**.
- Led physical assembly of hull, propulsion, and internal mounting systems in a **4-member subteam**.
- Integrated hardware with onboard electronics and sensors.
- Collaborated with software and electrical subteams to ensure system compatibility.

SKILLS

Languages: Java, Python, C++, C, TypeScript, JavaScript, SQL

Frameworks & Libraries: FastAPI, React, Next.js, Express, Node.js

Tools & Platforms: Git, Linux, Vercel, Dolt

ACTIVITIES & AWARDS

- **Chancellor's Associates Scholarship:** Need-based, nomination scholarship awarded to select students.
- **Blue Robotics Special Award:** Semifinalist, merit recognition award for Scottie Subs in Robosub 2023.