

Education

University of California, Davis

Davis, CA

Bachelor of Science, Computer Science and Engineering; Economics Minor

Expected Graduation: June 2022

Relevant coursework: Object-Oriented Programming in C++, Data Structures, Algorithm Design & Analysis, Machine-dependent Programming, Computer Architecture, Operating Systems, Software Engineering, Software Tools, Computer Networks, Circuits, Embedded Systems

Skills

Languages: Python, Java, JavaScript, HTML/CSS, C, C#, C++, Solidity, R, SQL, Haskell, Prolog, Assembly, Chisel

Frameworks/Libraries: React, Node.js, Express, MongoDB, Django, Bootstrap

Technologies: Git, Vim, MySQL, NoSQL, Linux/Ubuntu, Google Cloud, Firebase, REST APIs

Work Experience

Security Lab at UC Davis | Software Research Assistant

January 2022 – Present | Davis, CA

- Currently designing and building a research project to sanitize network data and secure sensitive data. The program takes in a packet from the current network in PCAP format and returns a changed packet out by recomputing the checksum and replacing the header file in the packet using **Python**, **JavaScript** input validation, and a **NoSQL** database.
- Utilized the source code to migrate the database onto a cloud-based service.

UC Davis Office of Research | IT Operations Student Assistant

October 2020 – Present | Davis, CA

- Managed the OR security system using secure network VPNs, regular security scans, and updating firewalls and routers.
- Identified and resolved major client queries using command-line tools, **SQL Queries**, and **Python** workflows.

SacHacks | Finance Associate

January 2020 – Present | Davis, CA

- Managed budget accounts, fundraising, external sponsorships, and other financial filings while adhering to non-profit status.

Blockchain at Davis | Director of Operations and Outreach

September 2019 – December 2020 | Davis, CA

- Created an environment to educate students on FinTech concepts and Blockchain programming languages such as **Solidity** and **C++** through intensive coding workshops and research projects.
- Managed the operations team to organize weekly brainstorming mixers for members which led to an increase in club projects.

Alletec (Microsoft Gold Partner) | Software Engineering Intern

July 2019 – August 2019 | New Delhi, India

- Joined the CRM team to work and build on **Microsoft Dynamics 365** for Sales operations using **C#**.
- Built web forms and templates using **Microsoft .NET** to map data onto the Alletec database system to analyze and clean data in order to improve end-user experience.
- Participated in product management meetings to review product impact and feedback to increase productivity.

Projects

Paper Trading Platform

- Designed and built a web application using **ReactJS** and **HTML/CSS** to simulate the stock market and allow users to practice trading without any financial risk.
- Stimulated stock market data using the Yahoo Finance API integrated with the **Django** framework in the backend.
- Built user profiles using Django, authenticated users with Google, and stored user data using a NoSQL database from **Google Cloud**.

DCash Wallet

- Built a concurrent web server using **C++** and **Bootstrap** to serve as a virtual wallet for users to transfer and receive money.
- Implemented services like user authentication, money transfer and money deposit while storing user data in a local database.

Vocalize

- Implemented a mobile application which enables individuals with Autism Spectrum Disorder (ASD) to communicate effectively by visualizing text to speech using an integrated chat extension.
- Paired the **Google Firebase** backend with **GPT-3** that utilizes deep learning to produce human-like text for data conversion.