Charles Zhu

Education

University of California, Los Angeles

GPA: 4.0 | B.S. in Computer Science

• Activities: ACM Dev Team, Association of Chinese Americans

Monta Vista High School August 2018 – June 2022

GPA: 4.0, **SAT:** 1530 Cupertino, CA

Experience

ACM Dev Team November 2022 – Present

SWE Intern

Los Angeles, CA

Los Angeles, CA

Expected Graduation: June 2026

- · Developed landing page with HTML/SCSS/React used by ACM committees and viewed by hundreds of students
- · Designed website to be easily customizable for different needs to allow for efficient and consistent updates
- Collaborated with group members to divide workload by components and regularly reviewed code quality

Pioneer Academics June 2021 - September 2021

Research Intern

Cupertino, CA

- Completed research project using Python under Professor Sebastiaan Joosten from Dartmouth College to find most effective chess openings for different ratings using Stockfish engine and Lichess database
- Represented opening moves with custom tree data structure to optimize position evaluation times
- Authored 20-page research paper demonstrating findings

Aspiring Scholars Directed Research Program (ASDRP)

June 2021 - August 2021

Research Intern

Cupertino, CA

- Performed time-series analysis with Python under mentorship of Samuel Fendell to evaluate effectiveness of Twitter sentiment at predicting stock prices
- Pre-processed and analyzed datasets from 2015 to 2020 containing S&P 500 stock prices and tweets concerning NASDAQ companies
- · Measured series correlation and model prediction accuracy using various statistical methods

Bay Area Tutoring Association

September 2020 - February 2021

Volunteer Tutor

Cupertino, CA

- Introduced 30+ students to web development (HTML/CSS) and Python through code.org exercises
- · Led students in developing dozens of personalized websites during one-on-one sessions
- · Coordinated with other tutors to organize lesson plans over several weekly sessions

Projects

Personal Website | HTML/CSS, React

July 2022 - August 2022

· Created personal website using React.js and several React libraries for animation and effects

Interact Tutors | HTML/CSS, JavaScript, Flask, SQL

August 2020 - July 2022

- Designed, developed, and deployed a full-stack tutoring website to connect high school tutors with younger students
- Implemented relational database using MySQL to store information about tutors, tutees, and tutoring sessions
- Automated application process and handled tutee requests
- 30+ tutors and 350+ total hours tutored

Terrain Classification Neural Network | Python

June 2020 - July 2020

- Trained a neural network to classify images on terrain and suitability for driving at the UCSB Summer Research Academies
- Compared model accuracy with several popular pre-trained models
- Co-authored a research paper and presented findings at capstone seminar

Technical Skills

Languages: Python, Java, C, C++, HTML/CSS, JavaScript, SQL

Technologies/Frameworks: GitHub, Bootstrap, Flask, React, PyTorch, scikit-learn

Relevant Coursework: Data Structures, Multivariable Calculus, Linear Algebra, Discrete Mathematics

Spoken Languages: English (native), Chinese (fluent)