

Charles Zhu

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Education

University of California, Los Angeles (UCLA)

Expected Graduation: June 2026

GPA: 3.94 (Dean's Honors) | B.S. in Computer Science

Los Angeles, CA

- **Activities:** ACM Dev Team, UPE Honor Society, Association of Chinese Americans
- **Relevant Coursework:** Data Structures, Computer Organization, Software Construction, Algorithms and Complexity, Multivariable Calculus, Linear Algebra, Differential Equations, Discrete Mathematics

Monta Vista High School

August 2018 – June 2022

GPA: 4.0

Cupertino, CA

Experience

Native English Institute

July 2023 – August 2023

SWE Intern

Kobe, Japan

- Built automated scheduler to match 100+ student appointments with 30+ teachers per day based on several criteria
- Improved teacher workflow design to optimize teacher rankings and integrated logic into algorithm with TypeScript
- Conducted regular tests using Docker and Kubernetes to ensure algorithm accuracy and reliability

ACM Dev Team

November 2022 – Present

Officer

Los Angeles, CA

- Developed site template with HTML/SCSS/React used by ACM committees and viewed by thousands of students
- Designed template to be easily customizable by fetching individual committee data from spreadsheets using TypeScript
- Collaborated with group members to divide workload by components and consistently 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 13 million S&P 500 stock prices and 2 million tweets concerning NASDAQ companies
- Measured series correlation and model prediction accuracy using diverse statistical methods

Projects

Personal Website | HTML/CSS, React

July 2022 - August 2022

- Created dynamic 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 streamlined 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 prominent pre-trained models
- Co-authored research paper and presented findings at capstone seminar

Relevant Skills

Languages: fluent in Python, Java, C, C++, HTML/CSS/SCSS, JavaScript, TypeScript, SQL; proficient in Assembly

Technologies/Frameworks: GitHub, Bootstrap, Flask, React, MySQL, Node.js, Docker, Kubernetes, PyTorch, scikit-learn

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