

Martin Z. Estrin

mzestrin@usc.edu | (206) 572-9714 | martinestrin.com | linkedin.com/in/martinestrin | github.com/martyestrin

EDUCATION

University of Southern California

Los Angeles, California

B.S. & M.S. in Computer Science

May 2026

- **GPA:** 3.85/4.00, *Dean's List*, *Academic Achievement Award*
- **Related Coursework:** Data Structures, Algorithms, OOP, Intro to AI, Intro to ML, Probability Theory, Applied Statistics
- **Organizations & Leadership:** TAMID Consulting (Vice President), Association of Computing Machinery, Daily Trojan

TECHNICAL SKILLS

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

Frameworks: Django, Flask, Angular, Node.js, PyTorch, Spring Boot, React

Developer Tools: VS Code, Eclipse, Git, Docker, PyCharm, IntelliJ, Firebase, AWS, MySQL

EXPERIENCE

CodeHS

Chicago, Illinois

Software Engineer Intern

June 2024–Aug 2024

- Implemented Two-Factor Authentication for the CodeHS website, leveraging an open source Python library to bolster account security and ensure privacy features for over 15,000 students and teachers
- Engineered a rubric-based AI grading system, utilizing the OpenAI API to generate rubrics for over 1,000 assignments on the CodeHS site, resulting in a 15% improvement in user satisfaction with AI grading systems

Outlier

San Francisco, CA (Remote)

Software Engineer - AI Training

January 2024–May 2024

- Successfully completed over 250 complex coding challenges on the Remotasks platform in C++, Python and Java, enhancing the accuracy and efficiency of AI-powered models
- Authored in-depth explanations for over 50 programming challenges — encompassing greedy algorithms, divide and conquer, backtracking and dynamic programming — facilitating the training of generative AI models

USC Viterbi School of Engineering

Los Angeles, California

CS 170 Course Producer

January 2024–May 2024

- Composed 10 homework assignments and 15 lecture notes for USC's introductory computer science course, formulating a robust and comprehensive curriculum for a class of over 250 students
- Held bi-weekly office hours, actively assisting students in complex topics such as Runtime Analysis, Recursion, Sorting Algorithms, Graph Theory and Searching Algorithms

Morpheus Space

Los Angeles, California

Data Analytics Intern

August 2022–December 2022

- Analyzed revenues, expenditures and business needs using Excel, ensuring timely development of a multimillion dollar annual budget
- Engaged in three iterative user interface simulations, systematically identifying and documenting key errors in the user experience, ensuring the swift deployment of user-centric software solutions

PROJECTS

AI Playlist Generator

https://ai-playlist-app.onrender.com/generate_playlist

July 2024–August 2024

- Developed a Python Flask application integrating OpenAI and Spotify APIs to create personalized Spotify playlists of 10-20 songs based on user-generated prompts.

Stock Trading Site

<https://github.com/martyestrin/stockExchangeSite>

April 2024–May 2024

- Engineered a Java web application employing the Finnhub API to deliver real-time data for over 5,000 stocks, allowing users to look up share prices and manage stock portfolios stored in a MySQL database.

Student Sublease Connect

<https://github.com/davidaoyama/USC-Subleasing>

March 2024–May 2024

- Collaborated with a team of 6 student engineers to build a React web application with Spring Boot and DynamoDB that connects students seeking to sublease college apartments over the summer

Peer Tutoring System

<https://www.tutordashboard.martinestrin.com>

November 2023–December 2023

- Developed a website to pair students with online tutors based on subject needs, tutor expertise, and real-time availability, featuring a Gale-Shapley inspired matching algorithm with JavaScript and MongoDB

Word Ladder Game Solver

<https://www.doublet.martinestrin.com>

November 2023–December 2023

- Created an interactive web platform with Django, using Python to execute a custom C++ algorithm designed to solve the Word Ladder Game by optimizing the number of transformations required to reach the target word