Joshua Li

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Education

University of California, Los Angeles — Los Angeles, CA

Bachelor of Science in Computer Science (GPA 3.8) — June 2026 (Bachelor's)

- Relevant coursework: *Distributed Systems**, *Deep Learning II**, Programming Languages, Deep Learning, Computer Networking, Data Science (Machine Learning), Algorithms and Complexity, Operating Systems, Computer Organization, Software Construction, Theory of Computability, Digital Design Lab (Verilog), Statistical Programming, Linear Algebra, Multivariate Calculus; *(*current coursework)*
- Honors/Awards: Dean's Honors List (Fall 2022, Winter 2023, Spring 2023)
- Activities: Road to Damascus A Cappella, Grace on Campus (Web Dev Team, Music Team)

Work Experience

Software Engineer Intern

Anytime AI — June 2024 - September 2024

- Developed and improved Python script pipelines to crawl 200+ new court case summaries from the courts of New York, Pennsylvania
- Extracted/converted data from 500+ pdfs to json files containing metadata, page text, and footnotes in Python using PyMuPDF/fitz
- Leveraged tools such as aiohttp, Beautiful Soup, Python requests library, and PyMuPDF/fitz to crawl and extract data from both static HTML web pages as well as dynamic search-driven web pages
- All summaries crawled and text extracted were used as data to train Anytime's premier AI legal assistant model

Projects and Research

Predicting Keystrokes with Electromyography Signals

Deep Learning — February 2025 - March 2025

- Trained baseline + Long Short Term Memory (LSTM) and CNN + LSTM deep neural networks using PyTorch with GPU acceleration via CUDA on Meta's emg2qwerty time-series surface electromyography dataset to classify keystrokes from muscle activity
- Experimented with hyperparameters such as dropout and number of hidden layers, training 6 models for 10+ hours over 300+ epochs
- Achieved a 5% improvement in Character Error Rate over Meta's provided baseline model with the baseline + LSTM model

Transport Control Protocol and Transport Layer Security

Computer Networking — October 2024 - December 2024

- Implemented Transmission Control Protocol (TCP) and Transport Layer Security (TLS) in C/C++, simulating a bidirectional pipe between two processes over the network with C/C++ sockets

Let's Hangout: Event Planner for College Student

Software Construction — September 2023 - December 2023

- Built Let's Hangout, a web app which allows users to create accounts, make groups, create events, and manage RSVPs
- Team used a tech stack consisting of HTML, Javascript, React/Node.js, Python, CockroachDB/SQAlchemy, Vite, and Docker
- Personal responsibilities included front end styling using CSS / Bootstrap and implementing core functionalities such as popups, rsvp-ing, and API-driven database searches

Peach Party

Intro To Computer Science II — 2023

- Developed the videogame Peach Party, a spin-off of Mario Party, in 1000+ lines of C++ code, implementing 10+ actor classes with various actor interactions, and making use of polymorphism, object oriented principles, data structures, and memory management

Socioeconomic Position, Vaccination, and COVID-19 Infection- Agent Based Modeling and Data Analysis

Aspiring Scholars Directed Research Program — 2021 - 2022

under mentorship of Dr. Larry McMahan

- Analyzed government datasets using SciPy, identified a negative relationship for socioeconomic position with COVID-19 in California
- Used Mesa agent based modeling (ABM) framework in Python to simulate the spread of COVID-19 (published in the JEI in 2023)

Skills

Languages: C++ = Python > C = R > Java = Javascript; *Go, SQL (in progress)*

Skills: data structures/algorithms, Git, Bash (Linux), web crawling (aiohttp), web development, statistical analysis, asyncio, Beautiful Soup, React.js, NumPy, scikit-learn, neural networks (FCNNs, CNNs, RNNs), PyTorch

Interests: piano, violin, guitar, singing, traveling, movies, video games