

# MENGYU "JACK" ZHANG



Los Angeles, CA

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## EDUCATION

2019 – 2022

**University of Southern California**

**B.S. - Computer Science**

GPA: 3.86/4.0

Software Development, Discrete Math, Advanced Data Structures & Algorithms, Probability Theory, Machine Learning, Artificial Intelligence, Computer and Network Security

Summer 2019

**University of California, Berkeley**

**N/A (Summer Program)**

GPA: 3.75/4.0

Operating Systems & Networking, Machine Learning, Linear Algebra

2018 – 2019

**University of California, Merced**

**B.S. (transferred) - Computer Science and Engineering**

GPA: 3.75/4.0

Data Structures & Algorithms, Calculus, Computer Architecture, Computer Organization

## EXPERIENCES

Data Scientist

**Children's Hospital Los Angeles, Levitt Lab**

**Jan 2021 - Aug 2022 Part-time, since Aug 2022 Full-time**

/Software Developer

Machine Learning research and software development with a focus on EEG data and signal processing under Dr. Pat Levitt. My main focus was to analyze and eliminate unwanted noise from infant EEG data: I developed machine learning based pipelines that remove noise from EEG data through various means like Signal Processing (blind source separation), Computer Vision (movement analysis), etc.

Signal Processing / Computer Vision / Python / TensorFlow / EEG / MatLab

Software Developer  
Intern

**Royal Bank of Canada, Amplify**

**Summer 2021**

As a full-stack developer, worked on a team of 4 and developed the first end-to-end automated configuration solution for the SRE monitoring eco-system at RBC as part of its infrastructure-as-code initiative. I was responsible for the config generator, config deployer, backend for the user interface, and parts of the front end. The backend was built with Flask, the frontend with React, and deployed via Kubernetes.

Python / JavaScript / Flask / React / Kubernetes / DevOps / Jsonnet

Teaching Assistant

**University of Southern California, CS@SC**

**Jun 2020 - May 2021**

Taught introductory and intermediate level Python, Java, and Web development to students of different levels from middle/high school. Created unit tests for student assignments, wrote quizzes and review questions for the students.

Java / JavaScript / Python

## PROJECTS

Personal Project  
Full Stack

**Shopper**

**Since Oct 2023**

Purpose: one-stop solution for comparing grocery prices across different places.

Built a web app that compares grocery prices from different stores and retailers. Supports unit price conversion and comparison. Features reactive front end built with Svelte.

Svelte / JavaScript / Go / SQLite / Cloudflare Workers

Personal Project  
Android &  
Back end

**"KnockKnock"**

**Since Oct 2018**

Purpose: solve the problems I had with video calling people in noisy or inconvenient situations.

Built a WebRTC based video conferencing app with features like real-time captioning, language identification, noise-canceling, and manual camera controls. Utilized Machine Learning for multiple audio/image processing steps.

Android / Kotlin / Java / WebRTC / Python / Firebase / PHP / C++

Project Lead  
Full Stack

**GreatFinds**

**Sep 2020 to Nov 2020**

Software Development class final project, a platform that allows users to share all kinds of media content. Utilized the Java EE stack to develop server-client platform. Built the project structure with core components like JPA (database) and JSF. Coordinated efforts among all group members.

Java EE / JSF / JPA / MySQL / JavaScript

For more on my projects, visit [jackzhang.me/projects](http://jackzhang.me/projects).

## SKILLS (IN APPROXIMATE PROFICIENCY ORDER, MOST TO LEAST)

**Languages:** Python, JavaScript, Java, C/C++, Kotlin, Go, SQL, PHP, Bash, MATLAB.

**Frameworks/Tools:** Android, Node.js, React, Svelte, Flutter, Flask, TensorFlow, Firebase, Java EE, MySQL, GCP, WebRTC, CI.

## ACTIVITIES/HOBBIES

Machine Learning

ACM

Hackathons (e.g. HackSC, HackMerced)

Answering on Stack Overflow :)

CTFs (e.g. picoCTF: 400/16000)

## MORE

View the up-to-date version of this resume or learn more about me at [jackzhang.me/resume](http://jackzhang.me/resume)

