MENGYU "JACK" ZHANG

Los Angeles, CA
jackzhang.me or jackz314.me
me@jackzhang.me
github.com/jackz314
linkedin.com/in/jackz314
stackoverflow.com/u/8170714

EDUCATION

2019 – 2022	**University of Southern California**	**B.S. - Computer Science**

GPA: 3.86/4.0
Machine Learning, Artificial Intelligence, Software Development, Discrete Math, Advanced Data Structures & Algorithms, Probability Theory, Computer and Network Security

Summer 2019	**University of California, Berkeley**	**N/A (Summer Program)**

GPA: 3.75/4.0
Intro to Machine Learning, 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 /Research Assistant — **Children's Hospital Los Angeles, Levitt Lab** ⧉ — **Jan 2021 - Aug 2022 Part-time, since Aug 2022 Full-time**

Machine Learning research and software development with a focus on EEG data and signal processing under Dr. Pat Levitt. Primary goal: analyze and eliminate unwanted noise from EEG data, build pipelines that eliminate/correct unwanted noise from EEG data using various means like Machine Learning, Signal Processing, Computer Vision (movement analysis), etc.

```
Machine Learning / Signal Processing / Computer Vision / Python / 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. The backend was built with Flask, 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 — **"KnocKnock"** ⧉ — **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 ⧉.

SKILLS (IN APPROXIMATE PROFIENCY 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)
Answering on Stack Overflow :)
CTFs (e.g. picoCTF: 400/16000)
Build fun things, software and hardware

MORE

View the up-to-date version of this resume or learn more about me at
jackzhang.me/resume