

# Bill Zhang

408-585-8267 | [jzhang71@usc.edu](mailto:jzhang71@usc.edu) | [in/bill-zhang1/](https://in/bill-zhang1/) | [github.com/IdkwhatImD0ing/](https://github.com/IdkwhatImD0ing/) | [billzhang.tech](https://billzhang.tech)

## EDUCATION

### University of Southern California

*Master of Science in Computer Science - Artificial Intelligence*

Los Angeles, CA

August 2023 – Expected May 2025

### University of California, Santa Cruz

*Bachelor of Science in Computer Science*

Santa Cruz, CA

September 2020 – March 2023

## EXPERIENCE

### RingCentral

*AI Engineer*

June 2023 – Present

*Belmont, CA*

- Automated analysis of **10,000 weekly support chats** using OpenAI GPT-4, Pandas, and Google Cloud Platform (BigQuery, Cloud Storage), generating **20 visual reports** via Google Looker Studio.
- Increased resolution rate by **1400%** by developing a web chatbot using Weaviate Vector DB, OpenAI embeddings.
- Engineered a sales tool aggregating data from **15 sources** (including Salesforce and Highspot), leveraging custom XGBoost models processing **96 features** to create personalized sales pitches.

### SproutLabs, LLC

*Software Engineer Intern*

January 2023 – June 2023

*Santa Cruz, CA*

- Led development of a real-time admin dashboard in VueJS, featuring dynamic multi-faceted tables and Google Maps integration for precise device tracking and geospatial analytics.
- Implemented end-to-end and unit testing across 5 screen sizes and 3 browsers using Playwright and Vitest.

## PROJECTS

### Slug Loop | *React, Material UI, ExpressJS, C, Azure*

March 2023 – Present

- Developed a real-time bus tracking app for buses at UCSC, serving over **12,000 users**.
- Built a responsive React app with Google Maps integration to display active buses in real time.
- Achieved **Global Top 10** in the Google Developer Student Challenge out of **2000 teams worldwide**.

### DispatchAI | *NextJS, FastAPI, Twilio, RetellAI, Hume, Google Maps*

June 2023 – Present

- Developed an emphatic AI agent designed to triage calls and eliminate 911 wait times during emergencies.
- Integrated conversational AI powered call handling using Twilio with a custom fine-tuned Mistral 7B model.
- Won Grand Prize, AI For Good, and 1st place Intel at UC Berkeley AI Hackathon out of **900+ participants**.

### TalkToABank | *NextJS, OpenAI, RetellAI*

November 2023

- Developed a voice-based AI banking assistant providing services via phone calls to unbanked populations.
- Built multi-agent AI system using Retell AI and OpenAI for dynamic conversation routing and query handling.
- Secured 1st Overall and 1st place Goldman Sachs Winner at HackUTD out of **1,000+ participants**.

### ASL Recognition | *TensorFlow, Pandas, Sklearn, NumPy, Keras*

March 2023

- Developed ASL Recognition Snapchat filter using MobileNetV2, achieving **91.6% test accuracy** and reaching over **280,000 uses** in the Snapchat filter store.
- Leveraged image augmentation techniques like rotation and zoom, as well as object detection.

### WeCracked | *NextJS, Material UI, Firebase*

May 2023 – Present

- Co-founded WeCracked, a hackathon community, growing to **7,500 members** and securing \$10k in funding through 7 sponsors.
- Led a team of **20+ students** to build a website with NextJS and Firebase, secure sponsorships, coordinate PR, and manage a Discord community.

## TECHNICAL SKILLS

**Languages:** Python, JavaScript, TypeScript, C/C++, Java, HTML, CSS, Dart

**Machine Learning:** PyTorch, TensorFlow, Keras, NumPy, Pandas, Scikit Learn, Matplotlib, OpenCV, YoloV12

**WebDev/Cloud:** React, NextJS, Vue, Angular, Flask, FastAPI, ExpressJS, Azure, GCP, AWS, PostgreSQL, GraphQL

**Tools and Libraries:** OpenAI, Anthropic, Mistral, Cohere, LangChain, LlamaIndex, Git, Docker