

Bill Zhang

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EDUCATION

University of Southern California

Master of Science in Computer Science - Artificial Intelligence

August 2023 – May 2025

Los Angeles, CA

University of California, Santa Cruz

Bachelor of Science in Computer Science

September 2020 – March 2023

Santa Cruz, CA

EXPERIENCE

Applied AI Engineer

Scale AI

June 2025 – Present

San Francisco, CA

- Led agent design for the **TIME AI Agent** on a **3-person team** (frontend, backend, applied AI); built the agent loop, tool use, prompt hillclimbing, and evals for RAG search, summarization, and 13-language translation across TIME's 102-year archive at **~10 req/min**.
- Added TIME production guardrails (input filtering, refusal logic, prompt-injection defenses) and raised adversarial prompt blocking **30% → 95%**.
- Designed the medical claims agent on a **3-person team**; built multi-agent routing, structured tool schemas, and prompt/tool hillclimbing that improved accuracy **30% → 90%**.
- Built and ran the medical agent evals (**300 golden traces** + judge-LLM rubric) to resolve **20,000+ claims/week** with **~90%** audit accuracy and only **~10%** requiring human review.

AI Engineer

RingCentral

August 2023 – June 2025

Belmont, CA

- Built an LLM analytics + eval pipeline (OpenAI, Pandas, GCP) that expanded coverage of **10,000+ weekly** support chats from **1–2% → 100%**; cut processing time **8 hours → 1 hour**.
- Improved accuracy **90% → 95%** and cut agent hand-offs **40% → 13%** by adding rubric-based retrieval scoring and weekly monitoring (**20** Looker dashboards).

Software Engineer Intern

RingCentral

June 2023 – August 2023

Belmont, CA

- Shipped an LLM support chatbot with retrieval (Weaviate + embeddings), improving first-contact resolution **5% → 50%**.
- Won **1st place** in an internal hackathon building a webinar networking/contact-card product; secured adoption buy-in from **2 C-level execs** and **5 PMs** via stakeholder demos.

PROJECTS

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

March 2023 – Present

- Served **20,000+ users** by shipping a real-time UCSC bus tracking web app with a React frontend, ExpressJS APIs, and Azure deployment.
- Placed **Global Top 10** in the Google Solution Challenge out of **2,000+ projects** (2023).

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

June 2024 – Present

- Built and demoed a low-latency voice agent for emergency call intake + escalation (Twilio + FastAPI + NextJS), including intent routing and structured handoff to responders.
- Won **Grand Prize (\$50k)** at UC Berkeley AI Hackathon (**900+ participants**) by integrating RetellAI + Hume and deploying a real-time pipeline (fine-tuned Mistral 7B).

TalkToABank | *NextJS, OpenAI, RetellAI*

November 2024

- Won **1st Overall** at HackUTD (**1,000+ participants**) by building a phone-based AI banking assistant with multi-agent routing (NextJS, OpenAI, RetellAI).

TECHNICAL SKILLS

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

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

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

Tools and Libraries: OpenAI, LangChain, LlamaIndex, Git, Docker, Firebase, Supabase, MongoDB