Weibo Zhang

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EXPERIENCE

Software Developer — Jan 2025 – Present

Bluon

- Technicians receiving unreliable answers due to **30%** retrieval error rate; reprocessed **50k+** recordings into structured **JSON** and built **agentic AI tool-calling** with **Bluon API** and **Pinecone** — **73%** reduced error rate, **84%** of conversations now return verified equipment data
- Third-party cookie restrictions broke auth for technicians using partner apps; built **JWT** via **PostMessage API** and **Zustand**, restoring login and enabling chat history across **ServiceTitan**, **BuildOps**, and **Housecall Pro**
- Migrated the production database after a breaking **AI SDK** update, building **Zod** type-safe parsing to convert **200k+** existing chats to **AI SDK v5** with zero data loss

Software Developer Intern — June 2023 – Dec 2024

Bluon

- Built the first version of MasterMechanic, Bluon's AI-powered HVAC tech support chatbot, from **Figma** prototypes to production using **Next.js**, **OpenAI**, and **Pinecone** — later embedded as an iFrame in the **Bluon App**
- Added voice-to-text prompting with 68-language support, enabling Spanish-speaking technicians to get AI support in their native language
- Built an **OCR HVAC nameplate reader** for technicians who frequently mistyped model numbers — extracts model data from a photo, shipped as a production feature in the **Bluon App** and **Bluon API**

Co-founder & Web Developer — Oct 2022 – June 2023

Moonwish Studios

- Co-founded a web development studio, shipping **8** production websites for local businesses and generating **$5k+** in revenue
- Created a **Figma** design system cutting delivery to **3–4 days**; still maintaining all **8** sites and managing client communications 3 years later

PROJECTS

miaomo.ai — AI Research Assistant — In Progress

- Building a NotebookLM-style research tool with RAG-based document Q&A using **Next.js**, **TypeScript**, vector database, and LLM APIs
- Implementing semantic search and context-grounded responses as part of a university team project

ELI-Z — Explain Like I'm Gen Z

- Built an AI chatbot with a team of 5 that simplifies complex topics using Gen Z language — selected by a professor for a published research study with co-authorship

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Python, SQL

Frameworks: React, Next.js, Node.js, Tailwind CSS, AI SDK

Databases & Infrastructure: PostgreSQL, Supabase, Pinecone, Zustand

Tools: Git, GitHub, Vercel, Figma, Zod, REST APIs

AI/ML: OpenAI API, Anthropic API, RAG pipelines, prompt engineering, streaming, model evaluation

EDUCATION

California State University, Long Beach — B.S. Computer Science — Aug 2022 – May 2026