

Bob Tianqi Wei

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Education

University of California at Berkeley, College of Engineering

M.Des in Human-Computer Interaction

Aug 2023 – Dec 2024

Distinguished Scholar, 3.66/4

Tsinghua University, Academy of Arts and Design

B.A. in Industrial and Product Design

Aug 2019 – Jun 2023

3.71/4

Skills

Programming Languages: Python, JavaScript (TypeScript), C++ , HTML, CSS

Frameworks & Libraries: React 18, Node.js, Flask, Express, RESTful APIs, ReactFlow

AIML: LLM APIs, Prompt Engineering, CLIP, SentenceTransformers, ResNet50, UMAP

Databases & Infrastructure: Pinecone, SQLite (with vector extensions), Docker, Git

Design & Prototyping: Figma, Adobe Creative Suite, User Research, Interaction Design, Raspberry Pi, Rhino, AutoCAD

Projects

PartSelect Chat Agent - AI Agent for E-Commerce Customer Support (React, Node.js, Pinecone)

Jun 2024

- Engineered a production-ready e-commerce AI agent using DeepSeek, React, and Node.js to support customer service
- Integrated Pinecone vector DB (1536-dim embeddings) enabling sub-500ms semantic search and compatibility checks
- Built intelligent query preprocessing and multi-modal response generation, handling part/model number recognition, troubleshooting, and step-by-step installation guidance
- Delivered a fully functional prototype with <3s response latency, <1% error rate, and full mobile optimization within 48 hrs

GAF Sales Intelligence Platform - AI Agent for B2B Sales Insights (Python, FastAPI, Streamlit)

Jul 2024

- Designed and implemented a modular data pipeline to scrape, process, and enrich public contractor data
- Built a role-based web dashboard with interactive map visualizations and CSV export, enabling sales teams to prioritize leads and tailor outreach strategies
- Developed robust backend APIs and database models, ensuring scalable integration, efficient data retrieval

Ekphrasis – AI Feedback Tool for Graphic Design Education (Jupyter Notebook, HTML, Python)

Aug 2024 - Jan 2025

- Designed an AI-powered interactive tool offering visual feedback to help students understand abstract design concepts
- Conducted user research and thematic analysis with 11 educators to identify language barriers in design critique
- Developed an Interface and a machine learning model to generate contextualized visual examples based on students' work
- Improved learning outcomes for novice designers through real-time, visual, and context-aware design aids

Illuminatio – Adaptive Smart Lighting with Biocentric AI (C++ , Python, Raspberry Pi)

Jan 2023 - May 2023

- Created a biologically-informed smart lamp that adjusts light based on user rhythm and behavior
- Prototyped with Raspberry Pi, camera sensing, and servo-controlled light modulation. Created Rhino and AutoCAD schematics, fabricated custom aluminum mounts, and implemented dynamic scene transitions
- Explored user-in-the-loop adaptive systems for well-being and smart environments

Technical Experiences

Frontend Engineer, Create, Inc. San Francisco, CA, Contract

Jul 2025 - Present

- Built pixel-perfect, responsive web interfaces in React based on professional design specifications
- Authored clean, scalable front-end code with an emphasis on layout precision, component reusability, and visual consistency
- Collaborated cross-functionally with founding teams to deliver high-fidelity UI implementations under rapid iteration cycles

Research Engineer, Berkeley Institute of Design Lab, UC Berkeley EECS, Part-Time

Nov 2023 - Present

- Developed [ArtiFactor](#), an AI-powered creative workflow platform integrating multi-agent orchestration, LLMs, and multimodal ML models (CLIP, ResNet50, MiniLM) to support intelligent content generation and analysis
- Designed a semantic knowledge base system with vector embeddings. Architected full-stack systems using React, Node.js, and Python Flask microservices, with real-time agent triggering, workflow automation, and Dockerized ML backends
- Collaborated with designers, engineers and researchers to bridge AI/ML capabilities with intuitive UX

Research Engineer, Morphing Matter Lab, UC Berkeley Mechanical Engineering, Contract

Feb - May 2025

Product and Service Designer, Industrial and Commercial Bank of China, Internship

May - Aug 2022

Industrial Product Designer, ANTA Sports, Internship

Aug - Dec 2021

Visual and Product Designer, Nail & Hammer Creative (Guangzhou), Internship

May - Aug 2021