

PHU QUACH

quachphuwork@gmail.com | [Linkedin.com/in/quachthienphu](#) | [github.com/quachphu](#) | [quachphuportfolio](#) | 714-310-1206

Education

California State University Long Beach, Long Beach, CA
Hornos B.S. in Computer Science (Specialization: Artificial Intelligence)

Expected Graduation: May 2027
GPA: 3.8/4

Skills

Languages: Python(3 years), JavaScript (2 year), SQL(2 years), TypeScript, C++, Java, R, C#, Haskell, Go
Databases: MySQL, PostgreSQL, MongoDB, NoSQL, DuckDB, Neo4j, Vector Databases (Pinecone, Weaviate, FAISS)
AI & Tools: PyTorch, TensorFlow, Scikit-learn, Keras, MLFlow, OpenCV, Langchain, LangGraph, LLMs, RAG Systems
Frameworks: React, Node.js, Express.js, Next.js, Flask, FastAPI, Django, Dagster, CI/CD, Docker, Kubernetes, Git, Numpy, Pandas, AWS Cloud, Azure, Google Cloud

Professional Experience

Fetch AI, AI Software Engineer Intern

May 2026 – Present

- Designed and deployed **10+ AI agents** on Fetch.ai's Agent-verse PaaS, integrating with **SQL databases** and HubSpot CRM to automate processes, reducing delays by 40% and errors by 74%, while improving response times by 25%.
- Built a **TypeScript and React** front-end with dashboards and real-time tables, and staff scheduling views, connected to a **Flask API**, enhancing integration with AI agents and improving user experience.
- Built an **end-to-end AI pipeline** combining Fetch.ai's uAgents with RAG architecture, achieving **87% retrieval accuracy** on academic knowledge datasets across 1,200 test cases

ThinkNeuron, Software Engineer Intern

January 2026 – April 2026

- Developed a custom website front-end using Next.js, React, and TypeScript, enhancing user experience with a dynamic interface and resulting in a **20% increase** in user engagement metrics.
- Developed a scalable Node.js application using server-side rendering (SSR) to manage high-traffic sessions, resulting in improved performance and data accuracy **for over 100 concurrent users**.

CSULB College of Engineering, AI Researcher

July 2024 – December 2025

- Implemented AI applications in radiology, leveraging **SOTA deep learning techniques** to automate imaging analysis and LLM-driven report generation, reducing manual review time **by 50%**.
 - Developed a CNN-based computer vision model for foot X-ray analysis, improving diagnostic accuracy **by 80%**, training on a **12 GB dataset with 12,000 medical images** and fine-tuning state-of-the-art deep learning architectures.
 - Fine-tune LLaMA3-8B with **QLoRA and LoRA**, adapter layers, and mixed-precision training, reducing trainable parameters to 3M from 8B, boosting accuracy by 8% on 1000+ PubmedQA questions.
-

Projects

Nova AI - AI Powered Desktop Automation Agent | *Python, JavaScript, Node.js, Three.js, Gemini Live, REST API*
Website: <https://novatechai.tech/>

- Built a **voice-first AI desktop agent** using Gemini Live API WebSocket and Electron that gives users natural language control over their entire OS, including Gmail, Google Calendar, browser automation, and AI image/video generation
- Built a **persistent RAG memory** layer that saves and recalls user preferences, workflows, and past actions, personalizing every session for **+50 beta users**.

Warehouse AI - Autonomous Warehouse Robots | *Python, Gymnasium, PPO, Fireworks AI, Modal, MiniMax, HUD*
Website: <https://warehouse-rl.netlify.app/>

- Engineered a **Gymnasium-based multi-agent** warehouse simulation in which shared PPO policies coordinate autonomous robots, fulfill orders, avoid collisions, and respond to safety events.
 - Built a **benchmarking pipeline** evaluating six LLM dispatch coordinators on HUD's verifiable eval suite.
-

Achievement and Hackathon Win

- **1st Place** at USC AI Hackathon – VoiceBridge; **1st Place** at AWS Cloud Hackathon, UC Irvine – Mindfulness AI; **1st Place** at CSULB BeachHacks Fetch.ai Track – NeuroFlow; **1st Place** at DiamondHacks UCSD, Fetch.ai Track – AgenticHire; **2nd Place** at Loyola Marymount University California Business Datathon – California Labor Code Section 504; **Best Use of Blackboard.io MLH** at Caltech Hackathon and YC challenge – Nova AI; and **Best Use of Remy** by MindStudio – Planforce. **YC HUD Frontier/RSI RL Environments Hackathon** – Warehouse AI: Top 14 of 71 projects submitted. **YC Call My Agent Hackathon** – Apex AI: personal follow-up from YC Partner.
- **Sunstone Innovation Challenge – Top 3 Finalist (2026)**: competed with 40+ startups and secured \$5,000 in seed funding to accelerate product development.
- **Hackathon Director & ACM Vice President**: Scaled BeachHacks into the largest collegiate hackathon in Long Beach by securing \$11,000 in sponsorships across 10+ industry partners and leading a 20+ member organizing team.