Anish Kamatam

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Education

Chico State University, BS in Computer Information Systems — Expected May 2027
- **Coursework:** Programming and Algorithms I, Programming and Algorithms II, Information Systems Design, Data Structures and Algorithms, Linear Algebra, Discrete Math, Operating Systems

Technologies

Languages: Python, Java, C++, JavaScript, TypeScript, SQL (PostgreSQL, MySQL), HTML/CSS

Tools & Platforms: AWS (S3, Lambda, EC2, Amplify, SQS), GCP, Docker, Kubernetes, Git, GitHub, Node.js, Express

Libraries & Frameworks: React, Node.js, Express, Flask, Tailwind CSS, Pandas, Scikit-Learn, Keras, PyTorch, REST APIs

Experience

AI Engineer Intern, FundMore AI – Toronto, Canada — May 2025 – Present
- Designed a secure **NL-to-SQL** analytics system using **Vertex AI**, enabling natural language access to mortgage data while ensuring **0** tenant data leakage.
- Developed a multi-tenant AI assistant using **TypeScript**, **Angular**, **Node.js**, and **Sequelize**, serving **1,000+ users** across **50+ organizations**.
- Built a dynamic mentions system to enrich **LLM prompts** with **structured context**, improving response relevance for metrics queries by **30%**, enhancing system transparency for end users.

Data Science Extern, Amazon – Remote — June 2025 – Aug 2025
- Built an onboarding review triage system using **MiniLM embeddings** and **LightGBM** to rank early employee attrition risk
- Preprocessed **5K+** employee reviews with **pandas** and **scikit-learn**; improved **precision@10 by 18%** over baseline
- Applied **SHAP** to explain LightGBM rankings, highlighting influential tokens in the top **10%** of high-risk flagged reviews

Founder & Lead ML Engineer, AGNI X – San Francisco, CA — April 2025 – Present
- Developed an **autonomous drone system** for early wildfire detection and structural fire assessment using thermal imaging, computer vision, and 3D modeling using LiDar sensors.
- Built and optimized **real-time computer vision models** with **YOLOv8** and **custom CNN pipelines** on **NVIDIA Jetson Nano**, enabling onboard **fire detection, classification, and risk prioritization**.

Software Engineer Intern, TraceCloud – San Jose, CA — May 2024 – Sep 2024
- Engineered a **GraphRAG pipeline** that modeled requirements, dependencies, and Jira artifacts as graph embeddings, enabling **low-latency semantic retrieval** and cutting manual trace analysis by **30%**.
- Optimized **backend services** to handle real-time log ingestion at scale, resolving **3+** performance bottlenecks and improving system throughput.

Projects

AGNI X | Autonomous Drone for Wildfire Detection & Spread Modeling — May 2025
- Built an autonomous drone system on **NVIDIA Jetson Orin Nano**, integrating **YOLOv8**, **CNN pipelines**, **thermal imaging**, **LiDAR**, and **IMU data** to achieve **95%** wildfire detection accuracy and enable predictive fire spread modeling.
- Deployed cloud dashboard reducing response planning time by **40%** and delivering real-time intelligence to first responders
- Tools Used: Python, CUDA , C++, PyTorch, YOLOv8, OpenCV, Flask, Next.js, Docker

MedWise | Graph-RAG Semantic Retrieval for Brand-to-Generic Drug Mapping — April 2025
- Designed a healthcare platform with **graph-based RAG**, modeling relationships across **1,000+ drugs** to recommend **3–4** generic alternatives per search, reducing costs by up to **60%**.
- Tools Used: Next.js, React, TypeScript, Tailwind CSS, Flask, Neo4j, Pinecone, Llama 4

ViewLingo | AR Language Learning Platform — August 2025
- Integrated MentraOS with **multimodal AI** (speech-to-text, machine translation, AR overlays) and built conversational voice agents powered by LLMs for hands-free, immersive practice dialogues and live translation.
- Designed context-aware personalization algorithms that adapted to learner progress, improving vocabulary retention by **30%** in pilot testing while optimizing latency to under **200ms** for seamless AR interaction.
- Tools Used: MentraOS, Python, RoboFlow, OpenCV, PyTorch, TensorFlow