Akilan "Akil" Rammohan

+1 (XXX) XXX-XXXX | Los Altos, CA

akilan.rammohan@gmail.com | github.com/akilrammohan | linkedin.com/in/akilrammohan | akilr.com

Education

University of Wisconsin-Madison Madison, WI

Bachelor's of Arts, Computer Science and Data Science *Sep 2022 — May 2026*

- Relevant Coursework: Algorithms, Data Structures, Machine Organization, Compilers, Computer Engineering, Discrete Math, Linear Algebra, Machine Learning, Deep Learning, Programming Languages, Operating Systems, Algorithmic Game Theory

Work Experience

Data Analyst May 2025 — Sep 2025

Think Fast Talk Smart, the podcast *Los Altos, CA*

- Explored optimal episode posting cadence and titling patterns using linear regression and vector embeddings to generate data-driven recommendations for content strategy
- Translated business and strategy team directives into detailed statistical analyses, resulting in 50% more ad revenue
- Technologies: Python, SQL, matplotlib, pandas, Weaviate, OpenAI API, scikit-learn

SAIL Fellow May 2025 — Aug 2025

School of Computer, Data, and Information Sciences (CDIS) *Madison, WI*

- Developed an agentic news aggregator that detects and mitigates bias while aggregating from 50+ reputable sources
- Designed hierarchical agent team, which sourced news data using RSS feeds, web scraping, and news APIs
- Built custom agent tools including web scrapers and summarizers, and a harness for orchestrating multi-agent workflows
- Technologies: CrewAI, Weaviate, Docker, OpenAI API, Next.js, FastAPI

Undergraduate Researcher May 2024 — May 2025

NeuroErgonomics Lab *Madison, WI*

- Developed VR application for de-escalation police training scenarios, deployed to HTC Vive and Meta Quest 3 headsets
- Implemented LLM-enabled AI NPCs to replace in-person acting requirements of contemporary police training
- Led participant studies with 10+ UWPD officers, collected feedback, and implemented SME-recommended changes
- Technologies: Unity, C#, InworldAI, ConvAI, Python, R, Tobii, Pupil Labs

Projects

Current side project: AI-powered Learning Management System (LangGraph, FastAPI, Docker, pgvector, Next.js, Vercel AI SDK)

- Design agents to help educators manage course logistics and draft course materials
- Implement adaptive AI tutor and reimagine lessons as chats with AI agents to better engage students
- Build agent tools and robustly test custom AI agents for course automation and material generation

Deepfake Audio Detection (huggingface, pandas, Kaggle)

- Compared CNN, transformer, and conformer neural network architectures for deepfake audio detection
- Finetuned downstream classifiers on wav2vec2 and wav2vec2-conformer models, achieving 6% EER on ASVSpoof 2019 dataset

TAVRFinder (Swift, SwiftUI)

- Developed iOS app that uses sizing algorithms to properly size transcatheter aortic valve replacement devices
- Collaborated with cardiologists to gather requirements and iteratively refine sizing algorithms based on clinical feedback

NBA Win Predictor (scikit-learn, PyTorch, pandas, Kaggle)

- Built neural network classifier to predict a win or loss for a team given their matchup and season stats up to that point
- Achieved 64% prediction accuracy, a 12% improvement over baseline logistic regression, after hyperparameter search and feature engineering

Skills

- **Programming Languages**: Python, Java, JavaScript/TypeScript, C, R, C#(Unity), Haskell, Swift
- **Technologies**: Cursor/Claude Code, GitHub Actions, LangGraph, Git, Docker, FastAPI, PostgreSQL, PyTorch, Next.js, RAG, PyTest