

Akbar Aman

akbaraman797@gmail.com | (224)-522-3075 | in/akbar-aman-94b1b6263 | github.com/ak23bar

WORK EXPERIENCE

Software Dev/ML: AI Trainer

Chicago, IL (Remote)

Outlier & Handshake

April 2025 - Present | August 2025 - Present

- **Prompt Engineering, C++, Python, SQL, JavaScript, Java, LLMOps, Applied ML, Data Labeling, Model Evaluation, NLP**
- Developed and evaluated prompts across technical domains, including code-based and mathematical inputs; reviewed AI-generated outputs for correctness, logic, and clarity, and produced improved reference implementations. Task submission feedback average of 4.5/5 over all projects; Given exclusive access to 3+ high-priority projects in recognition of performance. - Outlier (Scale AI)
- Collaborating with leading researchers through the MOVE Fellowship on contract-based projects to evaluate and refine state-of-the-art LLMs via data labeling, structured testing, and contextual analysis. - ([Handshake - MOVE Program](#))

Undergraduate Teaching Assistant

Chicago, IL

University of Illinois at Chicago (UIC)

January 2025 - Present

- Taught **CS 109: Programming for Engineers with MATLAB** (2 terms) and **ENGR 100/101: Engineering Success Seminar** series (2 terms), facilitating lab sessions, lectures, and seminar discussions for 600+ & 200+ students respectively.
- Created, graded, and administered homework, projects, and labs; proctored examinations while delivering constructive, targeted feedback. Boosted engagement through individualized support in office hours, online forums, and tailored exam-week reviews.

Deep Learning/AI Intern

Chicago, IL

UIC Department of Electrical and Computer Engineering

June 2024 - August 2024

- **Computer Vision, Neural Networks, Semi-Supervised Learning, Python, Pytorch, Circuitscape, Anaconda Navigator**
- Led a team of 5 interns in data collection, curation, training and validating wildfire detection models for real-time deployment.
- Fine-tuned ResNet18/50, EfficientNetV2, & other Pytorch models for video classification; optimized for latency and accuracy.
- Designed "Vision Mamba," a custom CNN that improved fire classification accuracy by 30% over baselines ([wildfire-pipeline](#)).
- Completed the HLS4ML Summer School at Northwestern University, gaining hands-on experience in high-level synthesis and edge AI workflows for deploying ML on FPGA hardware: [hls4ml Summer School](#) | [News](#) | [Northwestern Engineering](#).

UI/UX & Machine Learning Intern

San Francisco, CA (Remote)

STEM-Away

June 2023 - September 2023

- **AWS, GPT API, Softr, Airtable, Web Scraping, ML Pipeline, Data Integration, UX Prototyping, Cloud Deployment**
- Designed and deployed ML pipelines on AWS for automated data collection and analysis, integrated GPT API-driven workflows with web scraping and Softr/Airtable prototypes, and contributed to UI/UX enhancements. Collaborated on launching the ByteMasters platform in Sept 2023, [Team Members \(softr.app\)](#), a production-ready showcase for end users.

PROJECTS

- **Portfolio Website:** Built Matrix-themed web app with interactive terminal CLI (26+ Linux commands), deployed on Cloudflare Pages with automated CI/CD. (Live site showcasing full experience and projects available for review: link in bio)
- **MATRIX Voice AI Assistant:** Developed personal, conversational AI with ElevenLabs neural synthesis, real-time speech processing, and WebSocket audio streaming via Python/FastAPI. ([ak23bar/MATRIX: Voice AI assistant](#))
- **AI Album Finder :** Created music discovery platform integrating Spotify Web API and ML for mood-based recommendations.
- **UIC Research & Coursework:** Built wildfire detection pipeline with PyTorch (EfficientNetV2/ResNet18 + optical flow), C++ DSA library with HashMap & Dijkstra navigation, and ARM microcontroller apps with sensor integration & real-time C.

EDUCATION

University of Illinois Chicago, College of Engineering

Chicago, IL

Bachelor of Science - Computer Engineering (GPA: 3.65)

Expected: May 2027

SKILLS

Languages: Python, C/C++, JavaScript/Java, SQL, ARM/MIPS Assembly, MATLAB, HTML/CSS, VHDL, Verilog, TypeScript, Bash, Rust.

Tools & Platforms: Linux, REST/FastAPI, Git/GitHub, React/Node.js, Docker, Kubernetes, AWS, TensorFlow, scikit-learn, Pandas, FPGA.