Tejas Raman

<u>tejasraman.com</u> | 469-536-4873 | <u>tejassraman@gmail.com</u> | Frisco TX, 75035 linkedin.com/in/tejas-raman-1a892b255/ | github.com/traman2

EDUCATION

University of Texas at Dallas

Dallas, TX

Bachelor of Science in Computer Science, GPA: 3.73

August 2024 - May 2027

- Academic Excellence Scholar
- Relevant Coursework: Data Structures and Algorithms, Discrete Mathematics for Computing, Computer Architecture, Linear Algebra, UNIX Programming, Software Engineering, Computer Science 2

Technical Skills

Languages: Python, SQL, JavaScript, TypeScript, C++, Java, C#, HTML/CSS, LaTeX

Platform Development: React/React Native, Express.js, .NET MAUI, Flask, Tailwind, REST API, AWS

Machine Learning & AI: TensorFlow, Scikit-Learn, PyTorch, LangGraph

Data Analysis: Pandas, NumPy, Matplotlib, Seaborn

Databases: MongoDB, Pinecone, MySQL, PostgreSQL, DynamoDB

Developer Tools: GitHub, VS Code, IntelliJ, Eclipse, Vercel, PyCharm, CLion, Figma, TeXworks

EXPERIENCE

Full Stack Developer

 $June\ 2025-Present$

 $ElevAIte\ Workspace$

Richardson, TX

- Shipped ElevAIte, an agentic AI-powered student academic analytics portal, cutting query latency to 4ms and trimming avg. token use to 1.5K by leveraging LangGraph's node-edge orchestration to streamline LLM chains.
- Fine-tuned a Google BERT model to perform name entity recognition (NER) on syllabus text for user class objects, achieving 94% validation accuracy and improving the AI agent's precision in retrieving class details.
- Optimized frontend performance with React by utilizing TanStack Query, implementing aggressive caching, background refetching, and virtualized lists to sustain sub-4ms render times even with large datatables.

Project Mentee

January 2025 – June 2025

AI Society, University of Texas at Dallas

Richardson, TX

- Delivered a presentation outlining the tech stack, RAG architecture, and application workflow to a panel of 5 industry judges, earning 2nd place out of 13 projects for best use of AI to enhance student productivity
- Collaborated with a team of 6 to develop TaskMasterAI, an AI-powered academic assistant that generates flashcards and quizzes from the users inputted class topics and key learning objectives
- Contributed as a team member in building CRON jobs to update Friend Matchmaking trees, while managing tasks via GitHub issues and pull requests and coordinating work across backend and frontend branches.

PROJECTS

ThreadSight | Python, Resnet50, PyTorch, OpenCV, Matplotlib, NumPy, Pillow (PIL)

July 2025

- Developed a computer vision model that classifies clothing images into 13 fashion categories using a ResNet-50 CNN trained on 13,000 preprocessed images, achieving an F1-score of 0.83 and 57% validation accuracy
- Implemented Grad-CAM visualizations to generate heatmaps highlighting key image regions, improving model interpretability and improve debugging

SignLang | HTML, CSS, JavaScript, TensorFlow.js, MobileNet

July 2025

- Developed SignLangAI, a real-time sign language recognition web app using HTML, CSS, and JavaScript, enabling instant gesture translation via webcam without external hardware.
- Integrated TensorFlow.js with the MobileNet architecture to perform in-browser deep learning for accessible and low-latency sign detection, achieving < 1 ms latency for real time recognition.