

Emraan Yusuf

Dallas, TX 75061 | (614)-359-3186 | emraany1220@gmail.com | US Citizen
www.linkedin.com/in/emraanyusuf | www.github.com/emraany | emraanyusuf.com

EDUCATION

The University of Texas at Dallas, Richardson, TX

Expected May 2027

Bachelor of Science, Computer Science

GPA: 3.5

Relevant Coursework: Artificial Intelligence, Machine Learning, Databases, Networks, Data Structures and Algorithms

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, TypeScript, C, C++, HTML5, CSS, SQL, LaTeX

Frameworks & Libraries: React, Next.js, Spring Boot, Flask, Pandas, Pytorch, NumPy, FastAPI, Tailwind CSS, Recharts

Databases & Tools: Git, GitHub, PostgreSQL, Snowflake, Node.js, MySQL, MongoDB, Linux, Vercel, Railway, JSON, YAML

PROFESSIONAL EXPERIENCE

Natural Language Processing Lab – The University of Texas at Dallas, Richardson, TX

January 2026 – Present

Machine Learning Research Lead

- Led a team of 12 researchers producing 200+ weekly annotations to build datasets for detecting logical fallacies in political memes for multimodal AI systems
- Used Python to analyze annotation outputs, compare with model predictions, and support research on fallacy detection in political memes being submitted to the Association for Computational Linguistics (ACL)

Spectra – ACM Research, Richardson, TX

January 2026 – Present

Machine Learning Researcher

- Developed Python scripts using PyTorch and Hugging Face Transformers to generate and evaluate visual prompt injection attacks across 10K+ image trials, identifying conditions that increased model susceptibility by up to 3x
- Designed and implemented defense algorithms (e.g., image transformations and prompt hardening) in Python, reducing attack success by 26% without degrading model performance

PERSONAL PROJECTS

Conflict Coordinate, Personal

February 2025 – Present

- Built a full-stack geospatial platform using React, FastAPI, and PostgreSQL/PostGIS that allows users to explore active global conflicts on an interactive 3D globe and see the parties involved in each crisis.
- Engineered data pipelines using ACLED and GDELT datasets, transforming raw conflict events into structured crisis and actor records for real-time visualization.
- Implemented geospatial querying and aggregation logic using PostGIS to associate incoming events with nearby conflicts and maintain continuously updated situational awareness.
- Designed machine learning pipelines to classify conflicts and detect patterns in continuously updated global crisis data, with support upcoming for models to propose potential paths towards peace.

DC Daddy, HackUTD 2025

November 2025 – November 2025

- Engineered a full-stack data-center operations platform unifying routing, inventory, and work-order automation.
- Designed a multi-constraint routing engine using Dijkstra's Algorithm to reduce technician fatigue and travel.
- Implemented embedding-based ticket bundling and Slack/Gmail automation to structure unorganized requests.

QuranScope, Personal

July 2025 – August 2025

- Engineered a FastAPI backend serving 6,000+ verse records with indexed search and theme classification.
- Automated large-scale offline classification of verses using Python pipelines and embedding models.
- Developed AI-powered verse explanations and multi-style chapter summaries using a FastAPI backend.
- Integrated Git-based version control for structured JSON/YAML data management.

CAMPUS INVOLVEMENT

HackUTD 2025, 3rd Place Winner

November 2025

Colorstack, Member

January 2025 – Present

Artificial Intelligence Society, Member

January 2024 – Present

Association for Computing Machinery, Member

August 2023 – Present