

Education

University of Texas at Dallas
Bachelor of Science, Computer Science

Richardson, TX
Expected May 2025

Technical Skills

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

Technologies: PyTorch, Scikit-Learn, React, Git Bash, Vue.js, Pillow, Pandas, BERT, TensorFlow, Docker, AWS, Unix

Certifications: Azure AI Fundamentals, Azure AI Engineer Associate, AWS Cloud Practitioner

Experience

University of Texas at Dallas | Python, PyTorch, Pillow, Pandas
Undergraduate Research Assistant

Richardson, TX
May - Aug 2024

- Programmed an **Artificial Neural Network** for real-time translation of online media into under-supported languages, enhancing accessibility and inclusivity for diverse global audiences.
- Engineered a scalable and efficient translation pipeline, integrating **data preprocessing** techniques to ensure accurate and context-sensitive translations.

Association of Computing Machinery | PyTorch, Tensorflow, Pillow, BERT, ResNet-18, Pandas
Backend-Developer

Richardson, TX
Feb - May 2024

- Spearheaded a 5-person team to develop a **multi-model architecture Artificial Neural Network** that automatically detects persuasive techniques with a combined **precision** and **F-1 Score** of **87.9%** and **88.5%**.
- Pioneered the development of a **Convolutional Neural Network** model using **ResNet-18** with the purpose of being used as an **image-classification model** and has an **accuracy score** of **89.2%**.
- Collaborated in the design of the **Sentiment Analysis** model, powered by **BERT** and is used to study digital text to determine which persuasive technique it falls into.

Projects

Wrappers Chatbot | Python, React.js, Scikit-Learn, FastAPI, Pandas, NetworkX, Pydantic, Uvicorn
Oct - Nov 2024

- Created a **React.js web-based chatbot** for educational course recommendations using a **Python** backend, integrating **NLP** techniques & **CORS** configurations to process user inquiries with a **95% accuracy** in response relevance.
- Implemented a **dynamic course recommendation algorithm** using **topological sorting** in **NetworkX** & custom filtering logic to achieve **30% reduction** in redundant course suggestions by improving exclusion of completed courses.

Fintasy | Vue.js, Python, Vite.js, PostgreSQL, Docker, Alpaca API, FastAPI, Nginx, Pydantic, Uvicorn
Feb - May 2024

- Led the design and implementation of a full-stack paper trading simulation website, achieving a **98% accuracy** in real-world market data to advance the knowledge of those interested in real-world stock trading.
- Utilized **Vue.js** to develop a feature-rich web application, enabling user interactions through friend lists and virtual tournaments, which saw a **25% increase** in daily active users.
- Developed a robust **Python backend** and **PostgreSQL database** for stock information and user information enhancing data retrieval efficiency by **30%** and reducing server response times by **20%**.

Leadership

ACM UTD | Co-Director
Feb 2022 - Present

- Led a mentorship program with 75+ mentees, improving **70%** of mentee resumes & provided resources to increase their career growth.
- Collaborating with industry partners & professors to create events such as workshops, seminars, and socials in specific fields of IT.