

Education

University of Texas at Dallas
Bachelor of Science, Computer Science

Richardson, TX
Expected May 2025

Experience

University of Texas at Dallas | Python, Scikit-Learn, Pandas, NumPy, Beautiful Soup
Undergraduate Research Intern

Richardson, TX
May - Aug 2024

- Developed and deployed a robust **web scraper** using **Python** and **Beautiful Soup** that efficiently processed **HTML** code from over **500 websites**, generating a structured dataset crucial for training an **Artificial Neural Network** to enhance translation accuracy for underrepresented dialects with at least **100,000 official users**.
- Spearheaded the “Hafez Effort” **research** initiative by defining eligibility criteria for dialect inclusion, coordinating with faculty on project strategy, and supporting the overarching mission to deliver free, **AI-driven translations** for underrepresented communities.

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

Richardson, TX
Feb - May 2024

- Led the creation of a **multi-model Artificial Neural Network** for persuasive technique detection, achieving an **accuracy of 89.2%** and **precision of 87.9%**, and developed a **ResNet-18 Convolutional Neural Network** for **image classification**.
- Collaborated on the design of a **Transformer-based BERT Sentiment Analysis model**, enabling accurate **classification** of persuasive techniques in digital text.

Projects

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

- 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, FastAPI, Alpaca, Nginx, Pydantic, Uvicorn

- 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 structured **mentorship program** for over **75 mentees**, offering one-on-one resume reviews, career advice, and personalized growth plans, resulting in a **70% improvement** in mentees resumes, and provided targeted resources on key CS career paths - such as **Software Engineering**, **Cybersecurity**, **Data Analysis**, and **Machine Learning** - to empower participants with practical industry insights..
- Fostered partnerships with industry leads (e.g., CBRE) and university professors to coordinate hands-on workshops, seminars, and networking socials across various IT disciplines, and bolstered ACM UTD’s mission of delivering cutting-edge professional development opportunities for aspiring tech professionals.

Technical Skills

Languages: Java, Python, JavaScript, HTML, CSS, SQL, C++, C#
Frameworks: NumPy, React.js, Next.js, Scikit-Learn, PyTorch, Vue.js, Vite.js, Matplot-Lib, Tensorflow
Technologies: Pandas, Git, Git Bash, GitHub, Docker, Docker Containers, PIL, AWS, PostGreSQL, Unix
Certifications: Azure AI Fundamentals, Azure AI Engineer Associate, AWS Cloud Practitioner