Nafisa Mehjabin

Fairfax, VA· (571) 332-8419 · nmehjabi@gmu.edu · GitHub · Webpage

EDUCATION

Computer Science, MS — Expected: May 2025
George Mason University (GMU) — Fairfax, VA
CGPA- 3.89/4.0
Courses: Analysis of Algorithms, Software Design and Architecture, Database Systems

Software Engineering, **BS** — May 2022
Islamic University of Technology (IUT) — Bangladesh
CGPA- 3.72/4.0
Courses: Data Structure, Object Oriented Concepts, Design Patterns, Server Programming

AWARD AND RECOGNITION

Accepted Poster, I-Week Graduate Student Poster Competition, GMU — Feb 2025

3rd Place- DataStorm, GMU Schar School of Policy and Government — Nov 2024

2nd Place- Misinformation and Disinformation Ideathon, R Street Institute & GMU — Apr 2024

EXPERIENCE

Tech Assistant I — Jun 2024 – Current
CVPA Tech Department, George Mason University

- Designed and automated a data categorization and tracking system for annual reporting, leveraging NLP text processing and Python to enhance reporting and decision-making.
- Developed and maintained the department's Intranet site and automated student evaluation report generation using Python, and Microsoft Automate to streamline faculty data access.

Research Intern — May 2024 – Aug 2024
George Mason University

- Investigated state-of-the-art Large Language Models (GPT-4, Gemini, Mistral) for real-world navigation and task planning. Assessed LLM performance through rigorous evaluation of navigation instructions, hallucination frequency, and coherence Analysis.
- Designed an LLM-driven PDDL-based planner across five domain models, leveraging LLM to construct world models. Pioneered a novel safety assessment framework to investigate LLMs' situational awareness, identifying potential risk mitigation strategies for autonomous decision-making systems.

Software Developer Intern — Feb 2021 – Jun 2021
LEADS Corporation Ltd, Bangladesh

- Developed the frontend for a new module of a Banking Solution using Vue JS, ensuring a responsive and engaging user interface that contributed to the successful migration from a monolithic system to a microservice architecture.
- Collaborated with designers to ensure that the frontend met user-centered design principles, delivering an interface that was both functional and aligned with business objectives.

PROJECTS

InsightLegi: State Legal Insights Dashboard | *JavaScript***,** *React, Vite*
Developed the frontend for InsightLegi's data-driven dashboard using React and Vite, focusing on creating a responsive and engaging user interface that visualizes legal data like laws, penalties, and status for each state. Collaborated with the business team to ensure the dashboard met business objectives.

AI-Driven Predictive Modeling for Wheat Disease Classification | *Python, TensorFlow, PyTorch, Transformers*
Developed a predictive model to identify wheat diseases from plant images across diverse breed and regions, leveraging deep learning architectures like ResNet50 and Vision Transformers and implemented explainable AI techniques (Grad-CAM) to enhance model interpretability and understanding.

TECHNICAL SKILLS

Programming Language: Python, C, SQL, Java, MATLAB, SQL
AI & ML: Regression Models, Deep Learning Architectures, Supervised/Unsupervised Learning, NLP, Explainable AI
Tools: Oracle, PyTorch, HuggingFace Transformers, NLTK, SpaCy, Git, Jupyter Notebooks, Visual Studio Code