Nafisa Mehjabin

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EDUCATION

George Mason University (GMU), Fairfax, VA

Master of Science

Computer Science | CGPA: 3.83/4.0

Courses: Analysis of Algorithms, Software Design and Architecture, Database Systems

Islamic University of Technology (IUT), Bangladesh

May 2022

Expected: May 2025

Bachelor of Science

Software Engineering | CGPA: 3.72/4.0

Courses: Data Structure, Object Oriented Concepts, Design Patterns, Server Programming

AWARD

11 WILL	
3 rd Place- DataStorm, GMU Schar School of Policy and Government	Nov 2024
2 nd Place- Misinformation and Disinformation Ideathon, R Street Institute & GMU	Apr 2024
Star Performer Award- Robi Axiata Limited	Apr 2022
EVDEDIENCE	

EXPERIENCE

Tech Assistant I Jun 2024 – Current

CVPA Tech Department, George Mason University

- Providing technical support for classroom operations, including AV/OS setup, maintenance, routine system upkeep, troubleshooting, and responding to technical issues from faculty/staff.
- Automating student evaluation report generation using Python and Graph API for the Dean's office, assisting faculty members.

Research Intern May 2024 – Aug 2024

CS Department, George Mason University

- Conducted extensive testing of GPT-4, Gemini, and Mistral large language models (LLMs) through API integrations.
- Integrated real-world constraints such as time limitations and environmental factors to enhance navigational efficiency.
- Visualized navigation results by plotting maps and assessed LLM performance based on accuracy and contextual relevance.

Specialist, Business Intelligence Analysis

Oct 2022 – Jul 2023

Robi Axiata Limited, Dhaka, Bangladesh

- Utilized shell scripting to automate the generation of customer bases and seamless transfer to different servers, optimizing efficiency and reducing manual intervention.
- Executed comprehensive data migration plan, successfully migrating 50+ reports from SAP to Tableau, and production tables to Hadoop, resulting in a significant increase in reporting efficiency and cost savings.
- Developed Oracle procedures and utilized SQL and Python to extract data for customer segmentation for reporting, effectively communicating findings and recommendations to key stakeholders.

Software Developer Intern

Feb 2021 – Jun 2021

 $LEADS\ Corporation\ Ltd,\ Bangladesh$

- Implemented backend APIs and developed frontend with Vue JS for a new module of a Banking Solution, resulting in a successful migration from a monolithic system to a microservice system.
- Assisted in creating unit test scripts, updated test scenarios to align with evolving software requirements and functionalities and conducted end-to-end API testing.
- Engaged in daily scrum meetings, updated project trackers using Azure DevOps, and participated in peer code reviews to support Agile development processes.

RESAERCH PROJECTS

Deep Learning-Driven Wheat Disease Classification for Enhanced Agricultural Monitoring

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. Integrated Grad-CAM to enhance model interpretability feature interpretation.

Analyzing Economic Impact of AI-Induced Hallucinations

Presented a poster on the assessment of the economic impact of AI-induced hallucinations in customer engagement and marketing, creating prompt-based datasets using multimodal large language models (LLMs).

Software Requirement Classification with Transformers

Collected and analyzed Google and Play Store app reviews, curated labeled datasets, and applied Pandas, NLTK to preprocess data and used BERT/ RoBERTa model fine-tuning approach to achieve high accuracy in data classification task.

TECHNICAL SKILLS

- Programming: Python, C, SQL, Java, HTML, CSS, JavaScript
- Methods: Survey Design, Interviews, Statistical Analysis, Data Analysis and Visualization
- AI & ML: Supervised and unsupervised learning, Regression models, SVM, K-Means, GridSearch, Explainable AI, Prompt Engineering, PDDL
- **Tools and Frameworks**: Git, Jupyter Notebooks, Visual Studio Code, Google Workspace, Keras, TensorFlow, PyTorch, TensorFlow, NumPy, Pandas, NLTK, Spacy, HuggingFace, Transformers
- Languages: English (Professional), Bengali(Native)