Monirul Islam

Manhattan, NYC | 929-832-7339 | monirul.mahmud9@gmail.com

Portfolio | GitHub | LinkedIn

Experience

Design Inclusion & Access Lab | Graduate Research Assistant   *Jan 2024 - Feb 2025*

Collaborated on the *'Feasibility of Alternative Credit Scoring'* for the Credit Invincibles project funded by NSU-CTRG (CTRG-23-SEPS-02), increasing Loan approval by 20%. **Certificate**

Cosmic IT Ltd. | Junior Data Scientist   *Sep 2022 – Dec 2023*

Worked on *"Automating toll collection system by live scanning license plates on vehicles"*. Collaborated extensively on creating charts and plots to visualize data, and building an interactive dashboard using Tableau, Google Looker Studio, D3.JS and Excel charts.

Systech Datasoft | Trainee Engineer (Data Science)   *Apr 2022 – Jul 2022*

Customized an automated resume screening system with PDF parser for Systech Datasoft, using candidates' data to accurately predict suitability for positions with 97.92% accuracy. **Certificate**

Recent Projects

Ground based Sky Cloud Segmentation with U-Net

Developed a cloud segmentation model using a U-Net-based FCNN on ground-based optical imagery from 110 collected images. Handled modular training pipeline to allow easy scalability. [Source Code]

Attention and Residual Mechanism Enhanced DeepFake Detection

Implemented DeepFake detection using ARC-Net enhanced with attention and residual mechanisms. Applied GradCAM and LIME for interpretability and visual explanation of facial forgeries. [Source Code]

3D Alveolar Bone Defect Segmentation via Unsupervised Domain Adaptation

Segmented alveolar bone defects using unsupervised domain adaptation on 3D DICOM data. Automated 3D data labeling and processing pipeline for cross-domain medical imaging analysis. [Source Code]

Merkle Tree enhanced Decentralized and Secured Credit Scoring

Developed a Merkle Tree enhanced decentralized credit scoring system for data integrity and trust. Integrated SHAP and LIME for model explainability and transparent credit decision-making. [Source Code]

Unveiling the LinkedIn Job Hunt: Skill, Industry, and Salary Trends in the USA

Developed an interactive Tableau visualization analyzing LinkedIn job trends across various industries, skill demands, and salary ranges in the USA. [Visit]

Education

Fordham University, New York   **2024 - 2025**
MSc. in Computer Science | CGPA: 3.83

North South University, Bangladesh   **2019 - 2023**
BSc. In Computer Science & Engineering | CGPA: 3.43

Skills

Python, R, Tensorflow, Scikit Learn, GAN, Transformer, Federated Learning, Flask, Docker, Fast API, AWS (Sagemaker), BigQuery, CI/CD, A/B Testing, Tableau, D3.js, PySpark, MongoDB, SQL, Trello, Jira, Latex.