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 Vehicles License Plates". Collaborated extensively on creating charts and plots to visualize data, and building an interactive dashboard using Tableau, Google Looker Studio and D3.js.

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

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 image analysis. [Source Code]

Attention and Residual Mechanism enhanced Trustworthy 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]

Ground based Sky Cloud Semantic Segmentation with U-Net

Developed a ground-based cloud segmentation model using a U-Net based FCNN on 110 collected images (Annotated with Roboflow). Handled modular training pipeline to allow easy scalability. [Source Code]

Merkle Tree enhanced Decentralized and Secured Credit Scoring

Developed a Merkle Tree enhanced decentralized (SHA-256 hashing) credit scoring system for data integrity. Integrated SHAP and LIME for transparent credit loan 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 United States 2024. [Visit]

Education

Fordham University, New York

2024 - 2025

MSc. in Computer & Information 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, Jira, Latex.