MD Fuyad Ibnay Rafi

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EDUCATION

BRAC University

- *Bachelor of Science in Computer Science CGPA - 3.43* (2022 - February 2026)

Birshreshtha Noor Mohammad Public College

- *HSC in Science – GPA: 5.00 (2020)*

Birshreshtha Noor Mohammad Public College

- *SSC in Science – GPA: 5.00 (2018)*

SKILLS

Machine Learning & Data Science: Deep Learning (VAE), NLP, TensorFlow, Scikit-learn, Data Scraping, and visualization

Programming & Frameworks: Python, JavaScript (ES6+), React, Node.js, Express, Django, Tailwind CSS

Databases, APIs & Tools: MongoDB, REST APIs, Google Colab, VS Code, AWS cloud (AWS Skill Builder), Git

Soft Skills & Languages: Effective Communication, Teamwork, Problem Solving, Leadership, Bangla (Native), English (Fluent), Hindi (Conversational), Japanese (Basic), French (Basic)

PROJECTS

MERN Book Management Web Application

- Engineered a full-stack MERN application with comprehensive CRUD operations utilizing Node.js/Express REST API backend, MongoDB document modeling, React components, and Tailwind CSS styling for responsive book management
- Implemented scalable client-server architecture with component reusability, routing, API integration, and state management, demonstrating end-to-end MERN stack proficiency and production-ready design.

Hybrid Multimodal Music Clustering via Joint VAE

- Developed a multimodal VAE pipeline combining audio spectrograms and lyric embeddings for unsupervised clustering of 3835 clips from 600+ songs with missing-modality handling and cross-modal retrieval.
- Evaluated clustering quality across KMeans, Agglomerative, and DBSCAN algorithms using Silhouette, Davies-Bouldin, and Calinski-Harabasz metrics with UMAP/t-SNE visualizations.

Django Blog Web Application

- Built and deployed a full-stack Django web application featuring CRUD operations, authentication, routing, and responsive UI, demonstrating production-ready backend–frontend integration.
- Implemented a scalable architecture using Django ORM, HTML templates, and secure session handling, showcasing practical web development and deployment capability.

RESEARCH

- My research focuses on developing a machine–learning–based classification system for skin disease detection, capable of delivering clinic-level diagnostic support from ordinary mobile phone images, aiming to transform early dermatological screening and accessibility.

EXTRACURRICULAR ACTIVITIES

English Olympiad Cinematographer

- Led a team of 5+ members to produce documentary coverage for the English Olympiad Season 3 Grand Finale at UIU, capturing 10+ hours of footage and managing end-to-end production.
- Delivered high-quality event media for an audience of 300+ attendees, ensuring 100% on-time coverage and producing polished content used for official event promotion.

Hosted Gaming Events

- Served as the Gaming Secretary of the BNMPC IT Club. Organized and hosted multiple online gaming tournaments (PUBG Mobile, COD Mobile) with 80+ participants.