# Yamin Adnan

## Computer Science & Engineering Graduate

yamin.adnan408@gmail.com | +8801323933930 | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) |

## Education

**BRAC University**                                                                    **2021-2025**
Bachelor of Science in Computer Science & Engineering | CGPA: 3.65

**Cantonment English School and College, Chittagong**
HSC | Science | GPA 5.00 | Passing Year: 2020
SSC | Science | GPA 5.00 | Passing Year: 2018

## Experience

**Junior Executive, Administrative and Creative department, Football Club Of BRAC University**    **March 2022 – August 2022**
- In this role, I was responsible for designing creative social media posts for the club's social media handle and handling various administrative activities during events.

**Assistant Secretary, Performance department, BRAC University Cultural Club**    **October 2023 – May 2024**
- In this role, I was responsible for performing during different events of the cultural club and have performed during different plugged and unplugged shows.

## Recent Projects

**Gumbel-Softmax Feature Selection Networks for high-dimensional medical image analysis**
- Gumbel-Softmax based discrete feature selection inside 3D CNN pipelines to identify informative voxels and perform classification on high-dimensional MRI data.
- *Tech Stack: PyTorch, NumPy, Pandas, NiLabel, Scikit-learn, Matplotlib, TorchIO*

**Resonance**
- One-stop music platform to shop/rent instruments, book studios/pads, hire session musicians, and collaborate with others.
- *Tech Stack: MERN ( MongoDB, Express, React, Node.js)*

**BrickByte**
- A real estate project where users can look for properties to buy/rent through advanced search as well as sell/rent their properties by uploading their listings.
- *Tech Stack: MERN ( MongoDB, Express, React, Node.js)*

## Research Project

**Optimizing the Early Detection of Dementia by Tracking the Progression of Parkinson's Disease Using Deep Learning and Computer Vision**
- **Cohort Selection:** Define PD patients (with/without cognitive impairment) and healthy controls from PPMI dataset; select subjects with 4-5 years longitudinal visits.
- **Pipeline:** Phase 1 & 2: PD detection using 3D Inception V3 on baseline MRI then Cognitive impairment prediction with MRI + clinical features. Phase 3: Longitudinal disease trajectory learning and dementia risk forecasting.
- **Modeling:** Spatio-temporal deep learning on multi-visit MRI to capture progression patterns, estimate time-to-dementia, and identify transition points in disease evolution.
- **Evaluation:** Model performance evaluated using AUC, Accuracy, F1, and MAE, with explainability through Attention Mechanism to support clinical interpretability.

## Technical Skills

- **Languages:** Python, C/C++, SQL, Assembly
- **Database:** MongoDB, MySQL
- **Python Libraries:** NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn
- **Frameworks:** Tensorflow, Pytorch, MERN Stack
- **Design Tools:** Figma, Cisco Packet Tracer
- **Analytical Tools:** Google Analytics 4, Power BI
- **Office skill:** Sheets, Word, PowerPoint
- **Version Control:** Git, GitHub

## Certification & Courses

- Cleaning Data in Python - DataCamp
- Feature Engineering for Machine Learning in Python - DataCamp
- Supervised Learning with scikit-learn - DataCamp
- Introduction to Deep Learning in Python - DataCamp

## References

**Engr. Mohammad Kayes Ur Rashid**
Director-Engineering Services,
Equity Property Management Ltd
Mobile: 01736977649
Email: equity.kayes.construction@gmail.com