

Md. Esrat Hossan *Fresh Graduate*

 Dhaka, 1216, Bangladesh

 esrathossan99@gmail.com

 +8801872-190476

 17 | 2000-08-02

 <https://www.linkedin.com/in/esrat-hossan-3673571b4>

 <https://github.com/MdEsrat>



PROFESSIONAL SUMMARY

Dedicated to advancing Bangladesh's technology and data-driven economy by creating innovative software solutions and enhancing the practical applications of AI and data analytics. Committed to facilitating digital transformation across local industries through efficient, ethical, and impactful computing practices. Focused on conducting meaningful research and publishing high-quality work in artificial intelligence, data science, and machine learning to elevate Bangladesh's role in global technological innovation. Possesses expertise in developing interpretable, privacy-aware machine learning and computer vision solutions for real-world and healthcare applications, while ensuring transparency and fairness through responsible AI practices.

EDUCATION

B.Sc. in Computer Science & Engineering,

2022 – 2025 | Dhaka

Daffodil International University

GPA: 3.64(ongoing)/4.00

HSC (Science), Hazera Toju Degree College

2020 | Chattogram

GPA: 5.00/5.00

SSC (Science), Banskhali Adarsha High School

2018 | Chattogram

GPA: 5.00/5.00

SKILLS

Programming

Python, C/C++

Tools

Microsoft Office (Excel, Word, PowerPoint),
GitHub, Colab, VSCode,

Frontend

HTML, CSS, JS, Bootstrap, Tailwind

Database

MySQL

Language

Bengali (Native), English (Fluent)

PROJECTS

Student Hub

Developed a student management web application using HTML, CSS, Bootstrap, and PHP that enables students to view results, upload files, and submit feedback anonymously.

Teachers can securely review feedback. Integrated Google Auth API and Google Drive API for security and efficiency.

GitHub: github.com/MdEsrat/student-academic-hub

COMPETITIVE PROGRAMMING & CONTESTS

1. Take-Off Programming Contest, *Finalist*

2022 | Daffodil International University

CO-CURRICULAR ACTIVITIES

Class Representative, 4 years

Communication between students and faculty, feedback collection, leadership.

Joint Press Secretary, Daffodil AI Club

Managed announcements, documentation, event promotion.

CERTIFICATION

**Professional Online Web Design &
WordPress Theme Customization**
— UYLAB (2024)

Oracle Database Course
— ICT Division, Daffodil International
University (2025)

RESEARCH EXPERIENCE

Heart Attack Risk Detection (Explainable Stacking Ensemble)

Feature selection (RF, Chi-Square, ANOVA, PCA, LASSO) + stacking (XGB + RF).

5-fold CV accuracy: 96.57%. SHAP/LIME for interpretability.

Submitted to CMT.

Interpretable Thyroid Diagnosis

Feature selection (Chi-Square, ANOVA, PCA, LASSO) + stacking (XGB + RF LR).

5-fold CV accuracy: 99.5%. SHAP/LIME applied.

Under journal review.

Brain MRI Tumor Classification (RXV Ensemble)

Combined ResNet50V2, VGG16, Xception RF.

99.56% accuracy on 6,000 MRIs; Grad-CAM verified.

Submitted to IDAA 2025.

Remittance Impact on Bangladeshi Economy

Used RF/DT/NB/KNN/SVR/GNB to analyze GDP impact.

Preprint: 10.1310/RG.2.2.18002.06081

References

Md. Assaduzzaman, Assistant Professor, Department of CSE, Daffodil International University

 assaduzzaman.cse@diu.edu.bd,  +8801824089009

Shareair Sakib, Trainee Assistant Officer, IFIC Bank PLC

 shareairsakib@gmail.com,  +8801537245000

Syed Eftasum Alam, Lecturer, Department of CSE, Daffodil International University

 syedeftasumalam.cse@diu.edu.bd,  +8801624830751