Fariha Anjum Shifa

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Education

University of Dhaka, Bangladesh   *Jun 2023 — Dec 2025*
M.Sc. in Computer Science & Engineering —CGPA: **3.85**/ 4.0

University of Dhaka, Bangladesh   *Jan 2018 — Apr 2023*
B.Sc. in Computer Science & Engineering — CGPA: 3.21/4.0 (Last 60-credit GPA: **3.51**)

Coursework: Linear Algebra, Object-Oriented Programming, Operating Systems, Mathematical & Statistical Analysis for Engineers

Research Interests

- Natural Language Processing

- Human Computer Interaction

- Computational Biology

Publications

1. **Shifa, F. A.**, Shochcho, M. I., Arean, A. I. H., Rahman, M. A. U., Mazumder, M. R., Mahhin, A., Fahim, M., Amin, M. A., Ali, A. A., Rahman, A. K. M. M. R. (2025). *SOMAJGYAAN: A Dataset for Evaluating LLMs on Bangla Culture, Social Knowledge, and Low-Resource Language Adaptation.* Findings of IJCNLP–AACL 2025 [preprint].

2. Sakib, S., Faiak, A., Arean, A. I. H., **Shifa, F. A.** (2025). *NLP-DU at SemEval-2025 Task 11: Analyzing Multi-label Emotion Detection.* SemEval-2025 (ACL), Vienna, pp. 1269–1275.[pdf]

3. **Shifa, F. A.***, Hasnat, S.*, Murshed, S., Ahmed Rumee, S. T., Mahbub, M. M. (2024). *A Novel Approach to Classifying Plastic-Degrading Enzymes using Convolutional Neural Networks.* Poster accepted, 23rd Science Council of Asia Conference. [Preprint]

4. **Shifa, F.A.** et al. SimPrompt : Few-Shot Bangla NER with Similarity-Driven Demonstration Retrieval (**Master's Thesis**) [preprint][under review]

5. **Shifa, F.A.** et al. MET-BNER: A Dataset for Metonymy Resolution in Bangla Named Entity Recognition. [in preparation]

Research Experience

Data and Design Lab, University of Dhaka   *Aug 2024 — Aug 2025*
Research Intern, Dhaka, Bangladesh

Undergraduate Thesis

A Risk-Score Model for Dynamics of Infectious Disease Spread
Developed a mobility-informed model to track transmission dynamics and assign relative risk scores to adjacent locations.

Language and Aptitude Tests

TOEFL iBT: **104** (R 25, L 27, S 26, W 26) │ GRE: **312** (Q 158, AWA 3.5)

Honors and Awards

Government Honors Scholarship (2023) — based on B.Sc. results
National Girls' Programming Contest: **DU Trois** (27th, 2018), **DU Triumvirate** (2019)

Courses and Workshops

NLP Specialization — deeplearning.ai
DL Coding & Code Management Workshop — Center for Computational & Data Sciences

Projects

SudoKool — Python, OpenCV │ Code │ Demo   2022
Detected Sudoku grids and digits via camera and overlaid solutions on paper using Augmented Reality.

Perfect Hashing — Java, Android Studio │ Code   2021
Implemented perfect hashing for an English–Bangla dictionary to map keywords to values efficiently.

Esho Shikhi Bornomala — Android (Java) │ Code │ Demo   2019
Interactive app to help children learn Bangla alphabets.

Online Voting System — Java, JavaFX   2019
Socket-based registration and voting platform for candidates and voters.

Up and Up — C++, iGraphics │ Code │ Demo   2018
Desktop "rapid roll" style game; C++ backend with iGraphics UI.

Technical Skills

Language: Python, C, C++, Java
ML/DS Libraries: PyTorch, scikit-learn, Pandas, NumPy, Matplotlib, Seaborn, Plotly
Tools/Platforms: Git, LaTeX, Android Studio, MySQL, Flask

Extracurricular

Code Samurai Hackathon (2019) — Volunteer, University of Dhaka