# Fariha Anjum Shifa

#### **EDUCATION**

University of Dhaka, Bangladesh

06/23 - Present

M.Sc. in Computer Science and Engineering (Current GPA **3.71** / 4.0)

University of Dhaka, Bangladesh

01/18 - 04/23

B.Sc. in Computer Science and Engineering (CGPA: 3.21 / 4.0) (Last 60-credit GPA: **3.51**)

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

### **EXPERIENCE**

Research Assistant

Data and Design Lab

08/24 - present

# **PUBLICATIONS**

A Novel Approach to Classifying Plastic Degrading Enzymes using Convolutional Neural Networks (Accepted for poster presentation at 23rd Science Council of Asia Conference)

Fariha Anjum Shifa\*, Soharth Hasnat\*, Shabab Murshed, Sarker Tanveer Ahmed Rumee, MST Murshida Mahbub

# RESEARCH INTEREST

Natural language processing

Machine learning

Computational Biology

#### RESEARCH EXPERIENCE

Undergraduate thesis

01/22 - 01/23

- Title: A Risk-score based model for Dynamics of Infectious Disease Spread
- **Synopsis:** Based on human mobility data, this dissertation developed a model for tracking the transmission of an infectious illness throughout an area. It assigns a relative score to adjacent locations of an infected zone to determine the infectiousness of that location.

Master's thesis 08/24 -present

- **Title:** A study of the performance of Large Language Models on Bangla figurative language summarization
- Synopsis: Summarization of Bangla figurative language using transformer models.

Natural Language Processing (Ongoing)

07/24 - Present

- **Title**:Enhancing Bangla NER with Contextual and Semantic Features Understanding An ongoing work under data and design lab.
- **Title:** Hate Speech Detection in Bangla Code-mixed Text in social media *Investigation of sentiment in Bangla code mixed text.*

### LANGUAGE AND APTITUDE TEST

- TOEFL iBT: 103 (Reading 26, Listening 24, Speaking 25, Writing 28)
- **GRE**: 312 (Quant-158, Verbal-154, AWA-3.5)

## **PROJECTS**

# SudoKool | Python, Opencv | Git | Demo

2022

• A Python project that utilizes a camera to detect the edges and numbers of a printed Sudoku game on paper, then displays the results on the same paper using Augmented Reality (AR)

# Perfect Hashing | Java, Android Studio Git

2021

• An English to Bangla dictionary. Here, a perfect hashing algorithm was implemented to map the keywords to values in the dictionary.

# **Esho Shikhi Bornomala** (Let's learn Bangla Alphabets) | Android Studio, Java | Git | Demo

2019

• An Android app designed to educate children engagingly, helping them learn Bangla alphabets.

# **Online Voting System** | Java, JavaFX

2019

• An internet-based voting platform allowing candidates and voters to register and participate in the voting process. I employed Java socket programming to develop this system.

# **Up and Up** C++, iGraphics Library | Git | Demo

2018

• Up and Up is a desktop game resembling the rapid roll. It was developed with C++ as its backend programming language, and iGraphics library was employed for the UI

### **TECHNICAL SKILLS**

**Programming Languages**: Python, C, C++, Java

Libraries: Pandas, Numpy, Scikit-learn, Seaborn, Matplotlib, Tensorflow

**Database :** MySQL **Web Frameworks:** Flask

**Drawing & Typesetting**: Office, Latex, Beamer

Languages: English, Bangla

#### **HONORS AND AWARDS**

National Girls' Programming Contest Team name: DU Trois ( <b>27th</b> )	2018
National Girls' Programming Contest Team name: DU Triumvirate ( <b>participant</b> )	2019
Government Honors Scholarship Based on <b>B.Sc.</b> result of examination of 2021	2023

#### **COURSES AND WORKSHOPS**

Natural Language Processing Specialization by deeplearning.ai

DL coding and code management workshop at Center for Computational and Data Sciences

## INTERPERSONAL SKILLS

Problem-Solving, Time Management, Project Management, Leadership, Team Work, Teaching, Decision Making, Networking.

### **EXTRACURRICULAR ACTIVITIES**

Code Samurai Hackathon

Volunteer

HSBC - Prothom Alo Language Competition (Regional round)

2017

2nd runner up

Chattogram