

Md. Farhadul Islam

📍 Dhaka, Bangladesh ✉ md.farhadul.islam@g.bracu.ac.bd 📞 +8801918051324 in Md. Farhadul Islam
🔗 farhad324 📄 0000-0003-3249-4490 🎓 Md. Farhadul Islam 📺 Farhadul Islam

🎓 EDUCATION

Bachelor of Science in Computer Science, BRAC University 📄
CGPA: 3.84 (Highest Distinction), Credits Completed: 105

Sep 2019 – Present
Dhaka, Bangladesh

📁 PROFESSIONAL EXPERIENCE

Student Tutor, BRAC University 📄

Feb 2022 – Present
Dhaka, Bangladesh

Course(s):

- **CSE424** - Pattern Recognition (Fall 2022)
- **CSE431** - Natural Language Processing (Fall 2022)
- **CSE449** - Parallel, Distributed, and High-Performance Computing (Fall 2022)
- **CSE221** - Algorithms (Summer 2022)
- **STA101** - Introduction to Statistics (Spring 2022)

Responsibilities: Assignment Script Checking, Regular Consultations, Lab Tutoring, Lab Exam Invigilation

Undergraduate Research Assistant

Mar 2021 – Present

Working on Medical Image Analysis, Uncertainty Estimation, State-of-the-art Model Analysis and Applications with Deep Learning.

Supervisor(s): Jannatun Noor, Meem Arafat Manab, Annajiat Alim Rasel

Field: Deep Learning

🧠 SKILLS

OOP, Data Structures, Algorithms (Python, Java, C, C++)

Machine Learning/ Deep Learning (Tensorflow/Keras, ScikitLearn, OpenCV, NLTK)

Database Management System (MySQL) | **Backend Web Development** (Django)

Simulation & Modeling (SciPy, SimPy, SymPy) | **Web Scraping** (BeautifulSoup)

Data Analysis, Management & Visualization (NumPy, Pandas, Matplotlib, Seaborn) | **Basic Robotics** (Arduino (C++))

📖 PUBLICATIONS

Note: Plant Leaf Disease Network (PLeaD-Net): Identifying Plant Leaf Diseases through Leveraging Limited-Resource Deep Convolutional Neural Network, ACM SIGCAS/SIGCHI Conference on Computing and Sustainable Societies (COMPASS) (COMPASS '22), Seattle, WA, USA. 📄

2022

Authors: Joyanta Jyoti Mondal, **Md. Farhadul Islam**, Sarah Zabeen, A. B. M. Alim Al Islam, and Jannatun Noor.

Monte Carlo Dropout for Uncertainty Analysis and ECG Trace Image Classification*, S+SSPR 2022: IAPR Joint International Workshops on Statistical Techniques in Pattern Recognition (SPR 2022) and Structural and Syntactic Pattern Recognition (SSPR 2022), Montreal, Canada.

2022

Authors: **Md. Farhadul Islam**, Sarah Zabeen, Md Humaion Kabir Mehedi, Shadab Iqbal, and Annajiat Alim Rasel.

*Accepted, yet to be published.

Diagnosis of Autism Spectrum Disorder Through Eye Movement Tracking Using Deep Learning*, *International Conference on Information and Communication Technology for Development (ICICTD) 2022, Khulna, Bangladesh.*

2022

Authors: Nasirul Mumenin, **Md. Farhadul Islam**, Md. Reasad Zaman Chowdhury, Mohammad Abu Yousuf.

*Accepted, yet to be published.

REVIEWER EXPERIENCE

International Conference on Networks, Communication and Information Technology (NCIT 2022) 

Wuhan, China

PROJECTS

Bangladesh Solar Irradiation Prediction Using Stacked LSTM, *Single Project* 

2022

Data Collected from NSRDB, Used Lightweight Stacked LSTM Model to Predict GHI from Time Series (2018-2020) Data. Tensorflow/Keras was used.

Skin Cancer Diagnosis Using Deep Convolutional Neural Network, *Group Project* 

2022

CSE438 - Applied Data Science for Practitioners Project. Got the highest grade for this project. Used Tensorflow/Keras, Scikit-Learn for ML tasks.

Malware Classification using Deep CNN on Maling Dataset, *Single Project* 

2022

Achieved high accuracy with a CNN model made from scratch. Tensorflow/Keras was used. Model was developed focusing on classifying any type of malware attack images.

Monte Carlo Dropout for Uncertainty Analysis on California House Prices Dataset, *Single Project* 

2021

CSE474 - Simulation and Modeling Project. Analysis on how Feature Vectors can affect the uncertainty of an ANN model.

Brain Tumor Detection from MRI Images using CNN, *Single Project* 

2021

Classified Tumor and Non-Tumor Data, using CNN, achieved high accuracy. Tensorflow/Keras was used for this task.

Auto Chloro - A Plant Disease Classifier & Remedies Provider in Bangla, *Group Project* 

2021

2nd Runner up in Project Tech Tussle by IEEE Computer Society BRACU Student Chapter. Tensorflow/Keras was used for DL, EasyGUI for GUI.

Conference Management System, *Group Project*

2021

CSE370 - Database Project. For Backend Development Django was used and Used BeautifulSoup to scrape conference data. For DBMS, MySQL was used.

AirDraw-n-Match-A-Webcam-Paint-Digit-Recognition-Program, *Single Project* 

2020

One of the winners in Skill Showcasing - R@D!X (Radix) by BRAC University Computer Club. Used Tensorflow/Keras, OpenCV, EasyGUI for developing the whole project.

NESARC Data Analysis, Management & Visualization, *Single Project* 

2020

Coursera Course Project. Analysis on "How Depression Affects Diet and Lifestyle".

COVID19 Ventilator, *Group Project*

2020




Low-cost noninvasive ventilator. This allows control of respiratory rate and tidal volume where the patient will receive a set volume/pressure breath. Responsible for the software development with ARDUINO coding.

AirWire: Predicting Air Quality Index from Sky Images, *Group Project*



In Progress

Responsible for Machine Learning tasks, developed TFLite version for the project's mobile app. Tensorflow/Keras, TFLite, Scikit-Learn was used.

ONLINE COURSE CERTIFICATIONS

DeepLearning.AI Tensorflow Developer , <i>DeepLearning.AI</i> 	2021 Coursera
AI for Medicine , <i>DeepLearning.AI</i> 	2021 Coursera
Machine Learning Fundamentals with Python Track , <i>DataCamp</i> 	2021 DataCamp

PRESENTATIONS & LECTURES

Identification of Plant Leaf Diseases using Deep Convolutional Neural Network with Less Computational Power (Poster Presentation) , <i>8th International Conference on Networking, Systems and Security (NSysS 2021)</i>  Authors: Joyanta Jyoti Mondal, Md. Farhadul Islam , Sarah Zabeen, A. B. M. Alim Al Islam, and Jannatun Noor.	2021
Lecture on Monte Carlo Simulations , <i>CSE474 - Simulation & Modeling, BRAC University</i>  Invitation from the course instructor to take a class on Monte Carlo Simulations.	2022

AWARDS/ACHEIVEMENTS

Merit Based Scholarship Awarded for maintaining high CGPA. Awarded the scholarship for 6 semesters. Got upto 50% scholarship.	2020 – Present
Winner - Skill Showcasing Built a program where you can draw something without a keyboard or a mouse. It does not end here, it will give a random integer to draw, the Neural Network will predict the digit that you drew. The whole program works like a game.	2021
3rd Place - Project Showcasing , <i>IEEE Project Tech Tussle 2021 sponsored by Global Brand</i> Team Lead, and responsible for ML development. Built a framework to classify plant disease & provide remedies. The GUI is based on Bangla Language keeping in mind that, our primary target is to create an application to predict plant diseases and provide remedies for the Bangladeshi people.	2021
Top 10 - Idea Presentation , <i>Idea Competition - BUP MindExperia 2020</i> 9th Position in the idea contest. Leading the team and proposed the idea of Covid19 Tracker and Prediction focusing on Bangladesh.	2020

LANGUAGES

English <i>Full Working Proficiency</i>	Bengali <i>Full Working Proficiency</i>
French <i>Beginner</i>	Hindi <i>Conversational</i>

REFERENCES

Available on Request