

Adiba Mahbub Proma

adiba.proma@gmail.com

www.linkedin.com/in/adiba-proma

+1 585-512-4470

EDUCATION

Bachelor of Science in Computer Science and Engineering, 2016-2019

BRAC University, Dhaka, Bangladesh

CGPA: 3.97/4

Thesis topic: Analyzing Ensemble Learning Algorithms using Cluster Analysis of Binary Classification Problems

Relevant Courses: Machine learning, Artificial Intelligence, Data Structures, Algorithms, Numerical Methods, Database Systems, Elements of Statistics and Probability, Modern Probability Theory and Stochastic Processes, Linear Algebra

WORK EXPERIENCE

Contractual Lecturer, BRAC University **Jan 2020 - Dec 2020**

Courses conducted: Introduction to computing(CSE101), Data Structures(CSE220), Algorithms(CSE221), Microprocessors(CSE341), Compilers(CSE420)

- Teaching theory and/or lab classes of 40 students both in-person and online(during COVID-19 Pandemic)
- Collaborating with other faculty members to design and prepare course content, including assignments, quizzes and video lectures
- Evaluating students through assignments and quizzes and providing feedback

Intern at Technology for Development Unit, BRAC Skills Development Program **Feb 2020 - July 2020**

BRAC SDP is an initiative by BRAC NGO to increase the job placement of workers in the informal sector

- Analysed the behaviour of debtors in the BRAC PROMISE project and used data visualization methods using Tableau to aid optimization of field operations
- Designed an intelligent system for the field-level operations team in BRAC PROMISE project to predict the loan eligibility of a person based on the behavior of previous debtors by using ensemble learning algorithms
- Analysed data to determine how the COVID-19 pandemic affected people's income to aid the action plans of BRAC policy makers
- Proposed possible ways for industry-academia collaboration for BRAC
- Designed data visualisation techniques to display the most wanted technical skills in the future in the country

Student Tutor, BRAC University **May 2018 - August 2019**

Courses tutored: Programming Language I (CSE161- Basic Programming in Java) Data Structures (CSE220), Digital Logic Design (CSE260)

- Provided one-on-one and group consultation to students on course topics
- Assisted course instructors in conducting the labs
- Evaluated students by grading assignments and quizzes, and provided feedback

Feature Writer, The Daily Star **Jan 2016- April 2020**

The Daily Star is one of the leading English newspapers of Bangladesh

- Researched on local and international trends and collaborated with other writers to generate ideas for the weekly sections Lifestyle and Next Step
- Wrote articles related to social issues, career development, musings, and lifestyle for print and online platform (*click here for all published articles*)

ONGOING RESEARCH PROJECTS

Can-aware: interactive system for cancer awareness, screening and referral
The project aims to develop a smart interactive system for breast cancer awareness, and also develop an algorithm for initial risk assessment and early detection of potential breast cancer patients

Role: conduct technical research; lead a team of researchers, software developers, graphic designers and medical students

Funding: ICT division of Ministry of Posts, Telecommunications and Information Technology, Bangladesh

SELECTED COURSE PROJECTS

Extracting Bengali letters from Bengali words using RNN, LSTM, GRU and CNN

Image data of Bengali words are fed into the network and the predictive model can detect what alphabets are present in the word.

Firebot: A remote-controlled assisting robot for rescue missions
Accepted for poster presentation in ICIEV-IVPR 2018 Student Conference in Japan

The flame sensor, smoke sensor and temperature sensors collect data in real time, which is then sent to a nearby fire station through remote desktop to update firefighters.

TECHNICAL SKILLS

Programming Languages: Python, Java, HTML, CSS, C, C++, Arduino, 8086emu

Database: SQL

Scientific computing: Matlab

Applications: LATEX, Tableau, Piktochart

AWARDS AND HONORS

Highest Distinction, BRAC University

Awarded to students graduating with CGPA greater than 3.8

Vice Chancellor's list, BRAC University **Awarded for 8 semesters**

Awarded to students with GPA greater than 3.9

Dean's list, BRAC University **Awarded for 2 semesters**

Awarded to students with GPA between 3.70 - 3.89

Performance-based scholarship, BRAC University **2017-2019**

75 per cent tuition-waiver

Merit-based scholarship, BRAC University **2016-2017**

70 per cent tuition-waiver

2014 Daily Star Awards

Awarded for Country highest in Mathematics in IAL

2013 Edexcel Awards

Awarded for World Highest in Mathematics-B in IGCSE and 8 A*s in IGCSE

LANGUAGE SKILLS

Fluent English, Bengali

Basic French - Tres Bien" in Diplome D'etudes En Langue Francaise (DELF A1 Junior) from Alliance Francaise, Dhaka

ADDITIONAL ACTIVITIES

2019 University Rover Challenge

General member of the Writing team for BRACU Mongol-Tori

BRACU Mongol-Tori is a student-led, university-sponsored design team to build Mars Rover systems to compete in University Rover challenges across the world

BracuExpress, BRACU's student run campus newspaper

Feature Editor, June 2017-August 2018

Contributor, June 2016-June 2017

The Mason Jar - published by Worthy Publications

Co-author Published two short stories - The Swing, Build a bae