

Muhtasim Noor Alif

Dhaka, Bangladesh

+880 1756 466856 | muhtasimnoor@gmail.com | github.com/Alif108 | linkedin.com/in/muhtasim-alif/

Education

MSc in Computer Science and Engineering

Bangladesh University of Engineering and Technology

• **Registered Courses:** Advanced Digital Image Processing, Advanced Fault Tolerant Systems

July 2023 - Present

Dhaka, Bangladesh

BSc in Computer Science and Engineering

Bangladesh University of Engineering and Technology

CGPA : 3.78/4.00

• **Notable Courses:** Computer Networking, Computer Security, Compiler, Operating Systems, Computer Graphics, Simulation and Modeling, Bioinformatics, Machine Learning, Microprocessor, Microcontroller and Embedded Systems, Artificial Intelligence, Software Design, Discrete Math

March 2018 - May 2023

Dhaka, Bangladesh

Higher Secondary School Certificate

Notre Dame College

GPA : 5.00/5.00

2015 - 2017

Dhaka, Bangladesh

Secondary School Certificate

Ideal School and College

GPA : 5.00/5.00

2005 - 2015

Dhaka, Bangladesh

Work Experience

Lecturer

University of Asia Pacific

• **Course Instructor:** Numerical Methods, Artificial Intelligence, Digital Logic and System Design, Software Development

July 2023 - Present

Dhaka, Bangladesh

Skills

Programming Languages

C/C++, Python, Java, JavaScript, SQL, Bash, HTML, CSS, Intel 8086 Assembly Language, SQL

Tools

Git, Wireshark, LaTeX, Atmel Studio, Logisim, Proteus, Cisco Packet Tracer, Network Simulator (NS3), Autopsy

Database

Oracle, PostgreSQL, MongoDB, MySQL, SQLite

Frameworks

Django, Node, React, Express, Tensorflow, PyTorch, DjangoREST, OpenGL, React-Native

Research Interest

Data Mining, Human Computer Interaction, Artificial Intelligence, Machine Learning, Computer Vision

Research

GPT-Supported EFL Learning for Underprivileged Learners of Bangladesh

[Code]

Human Computer Interaction

Supervisor : Dr. A. B. M. Alim Al Islam, Professor, CSE, BUET

Collaborator : Dongwon Lee, Professor, Pennsylvania State University

August 2023 - Present

An investigation into the suitability of Large Language Models like ChatGPT and GPT-4 for English as a Foreign Language (EFL) education among young learners. This research includes data collection on students' performance using a custom app, participant interviews, and other methodologies.

Spatio-Temporal analysis of Deep Learning based Crime Prediction Models

June 2022 - Present

[Code]

Data Mining, Machine Learning

Supervisor : Dr. Tanzima Hashem, Professor, CSE, BUET

Collaborator : Dr. Mohammed Eunus Ali, Professor, CSE, BUET

An assessment of the performance of various state-of-the-art crime prediction models, with a focus on both spatial and temporal dimensions.

Projects

BookFlix [Code]

React, MongoDB, Express, Node

Bookflix is a subscription based book reading platform. Subscribers have access to a wide range of books and can enjoy reading their favorites. The system provides comprehensive information about the books and their respective authors.

Wireless Network Simulation [Code]

Network Simulator 3

Simulations are conducted for network topologies like wireless ad-hoc and the Low Rate Personal Area Network (LRWPAN) topology. Additionally, an enhancement to TCP-Vegas for wireless ad-hoc networks, referred to as 'TCP-VegasW', has been implemented.

Compiler [Code]

YACC, FLEX

Constructed a symbol table, developed a lexical analyzer, created syntax and semantic analyzers, and generated intermediate assembly code step by step.

Computer Graphics [Code]

OpenGL

Implemented a range of graphics algorithms, including the Raster-Based Graphics Pipeline, the Generation of various object types, Ray Tracing and Illumination techniques, among others.

Smart Health Tracker Watch [Code]

Atmega32, Arduino, AtmelStudio

Developed a smart watch that can monitor the user's heart rate, body temperature, and blood pressure. The watch also can detect if a user has fallen down and can send an alert to a predefined number.

Test Scores

GRE	313/340	Verbal: 153, Quantitative: 160, Analytical: 3.5	2023
TOEFL	111/120	Reading: 29, Listening: 28, Speaking: 26, Writing: 28	2023