

# **Syed Eftasum Alam**

**Date of birth:** 20/10/2002 | **Nationality:** Bangladeshi | **Sex:** Male | **Phone:** (+880) 1624830751 (Mobile) |

Email: syed.efta@gmail.com | Website: https://syed-eftasum-alam.github.io/Academic\_Portfolio/ |

Address: Bangladesh (Home)

### ABOUT MYSELF

A Computer Science and Engineering graduate and a university lecturer who has interest in manage- ment and leading team up front to achieve its goal alongside problem solving and exploring new fields.

I am enthusiastic about accepting fresh opportunities, embracing advancements in technology, and making valuable contributions to the creation of inventive solutions with the help of emerging Artificial Intelligence and Deep Learning that tackle practical issues. I believe in fostering an environment of curiosity, innovation, and collaborative learning, where students are encouraged to think critically and develop solutions to real-world problems.

#### WORK EXPERIENCE

### **DAFFODIL INTERNATIONAL UNIVERSITY** – DHAKA, BANGLADESH

**Department** Computer Science and Engineering

#### **LECTURER** - 01/07/2024 - CURRENT

- Conduct undergraduate Computer Science courses with comprehensive curriculum coverage
- · Provide academic counseling and guidance to students on coursework and career planning
- Serve as academic advisor to allocated student groups and mentoring programs
- Engage in research initiatives focusing on AI and deep learning applications

### III UNITED INTERNATIONAL UNIVERSITY - DHAKA, BANGLADESH

**Department** Computer Science and Engineering

### **INSTRUCTOR (CONTRACTUAL LECTURER)** - 23/01/2024 - 30/06/2024

- Conducted comprehensive classes on foundational and advanced computer science topics
- Provided personalized academic counseling and support to enhance student performance
- Coordinated documentation processes for Board of Accreditation for Engineering & Technical Education
- Developed course materials and assessment strategies for improved learning outcomes

#### **UNITED INTERNATIONAL UNIVERSITY** – DHAKA, BANGLADESH

**Department** Computer Science and Engineering

# INSTRUCTOR OF SPL SPECIAL CLASS - 01/10/2023 - 05/01/2024

- Conducted intensive remedial classes for Structured Programming Language (CSE 1111) course
- Developed personalized learning strategies for students with academic challenges
- Implemented innovative teaching methods to improve programming comprehension
- Supported students' academic development for enhanced performance in future semesters

### **UNITED INTERNATIONAL UNIVERSITY** – DHAKA, BANGLADESH

**Department** Computer Science and Engineering

### UNDERGRADUATE TEACHING ASSISTANT - 01/09/2022 - 01/01/2024

- Assisted faculty in conducting smooth and effective classroom sessions
- Provided comprehensive guidance to students on coursework and academic challenges
- Evaluated student performance through quizzes, midterms, and final examinations
- · Facilitated study groups and peer learning sessions for enhanced understanding

### EDUCATION AND TRAINING

18/01/2020 - 29/01/2024 Dhaka,, Bangladesh

**B.SC IN COMPUTER SCIENCE AND ENGINEERING** United International University

Website <a href="https://www.uiu.ac.bd/">https://www.uiu.ac.bd/</a> | Field of study Computer Science and Engineering | Final grade CGPA: 3.90 out of 4.00 |

Level in EQF EQF level 6 | Number of credits 137 | Thesis Recyclable waste image classification using convolutional neural networks,

Website https://www.dhakacitycollege.edu.bd/ | Field of study Science | Final grade GPA: 5.00 out of 5.00 | Level in EQF EQF level 4

2015 - 2017 Dhaka, Bangladesh

SECONDARY SCHOOL CERTIFICATE Savar Cantonment Public School

Website https://www.scpsc.edu.bd/ | Field of study Science | Final grade GPA: 5.00 out of 5.00 | Level in EQF EQF level 2

#### LANGUAGE SKILLS

Mother tongue(s): BENGALI

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	B2	B2	B2	C1

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user

#### LANGUAGE PROFICIENCY TEST

05/11/2024

**IELTS Score** 

Band: 7.0

Listening: 7.5 | Reading: 6.5 | Speaking: 6.5 | Writing: 6.5

**View Certificate** 

#### PUBLICATIONS

2023

An iot-and cloud-based e-waste management system for resource reclamation with a data-driven decision-making process,

This research presents an integrated system leveraging **Machine Learning**, **Deep Learning**, **IoT** and **cloud computing** technologies to optimize the end-to-end process of e-waste and recyclable waste management. The proposed solution enhances efficiency by enabling real-time waste monitoring, smart collection, and automated routing to designated recycling or disposal facilities. A data-driven decision-making framework supports operational planning, route optimization, and resource allocation, ensuring faster, more sustainable, and intelligent waste handling and resource reclamation.

M. Farjana, A. B. Fahad, S. E. Alam, and M. M. Islam, "An iot-and cloud-based e-waste management system for resource reclamation with a data-driven decision-making process," IoT, vol. 4, no. 3, pp. 202–220, 2023

**Authors**: Mr.Abu Bakar Fahad, Mithila Farjana, Dr. Motaharul Islam | **Journal Name**: MDPI IoT | **Publisher**: MDPI (Multidisciplinary Digital Publishing Institute)

2023

<u>Thought Scope: Human Cognitive Thinking Classification from Eye Position using Deep Learning and Digital Image Processing</u>

This research proposes an advanced model that integrates **deep learning** and **digital image processing** techniques to classify human cognitive states based on **eye position analysis**. By capturing and analyzing the movement and positioning of the eyeball, the system aims to predict cognitive patterns such as attention, focus, and mental engagement. The model is designed to enhance accuracy in cognitive state recognition, providing a foundation for applications in human-computer interaction, assistive technology, and behavioral analysis.

M. Farjana, S. E. Alam, A. B. Fahad, and R. Rahman, "Thought scope: Human cognitive thinking classification from eye position using deep learning and digital image processing," 26th ICCIT, IEEE, 2023, pp. 1–6

**Authors**: Mr. Abu Bakar Fahad, Mithila Farjana, Mr. Raiyan Rahman | **Journal Name**: 26th International Conference on Computer and Information Technology (ICCIT) | **Publisher**: IEEE Xplore

2023

### **Recyclable Waste Image Classification using Convolutional Neural Networks**

This research introduces an improved approach for classifying recyclable waste using **Convolutional Neural Networks (CNNs)** in combination with d**igital image processing techniques**. The model is designed to automatically identify and categorize different types of recyclable materials from images, enhancing the efficiency and accuracy of waste segregation. By leveraging deep learning,

the system supports smarter waste management practices and contributes to sustainable environmental solutions through automated classification.

1 A. B. Fahad, S. E. Alam, M. Farjana, S. Shatabda, and D. M. Farid, "Recyclable waste image classification using convolutional neural networks," in 2023 26th (ICCIT), IEEE, 2023, pp. 1–6.

**Authors**: Mr. Abu Bakar Fahad, Mithila Farjana, Dr. Swakkhar Shatabda, Dr. Dewan Md. Farid | **Journal Name**: 26th International Conference on Computer and Information Technology (ICCIT) | **Publisher**: IEEE Xplore

2025

## Advancing Individual Well-being: Fatigue Detection Enhancement using Deep Learning Models

Led a study on *Al-driven* (**Deep Learning**) fatigue detection to enhance workplace safety and employee well-being. Evaluated advanced deep learning models on a real-world dataset, identifying optimal solutions for scalable fatigue monitoring. Demonstrated the potential of machine learning to improve productivity and reduce health risks in high-demand industries, contributing to safer and more sustainable work environments.

**Authors**: Mohammad Masum Khondokar Efaz, Afsun Al Mayen, Mr. Raiyan Rahman | **Journal Name**: ICCA 2024: 3rd International Conference on Computing Advancements | **Publisher**: Association for Computing Machinery(ACM), New York, NY, United States

2025

Optimized Transformer Architecture for Enhanced Performance and Computational Efficiency in Natural Language Understanding and Generation

On Going

Authors: Mr. Nahid Hossain, Mr. Tarek Hasan

# PROJECTS

# Art\_patio

Art\_patio is a digital platform aimed at bridging the gap between artists, art enthusiasts, and gallery owners. This online art gallery provides a space where artists can upload and showcase their creations, allowing them to reach a wider audience and sell their artworks directly. At the same time, customers can easily browse, select, and purchase pieces of art through the platform. Additionally, gallery owners can use Art\_patio to promote and announce upcoming exhibitions or events, making it a comprehensive hub for the art community. The project reflects a strong vision of supporting artistic expression in the digital age while leveraging technology to connect creative individuals.

Tools: HTML, CSS, Java Script, Php, MySQL

Link <a href="https://github.com/Syed-Eftasum-Alam/Art\_patio">https://github.com/Syed-Eftasum-Alam/Art\_patio</a>

### **Pawsitive**

Pawsitive is a JavaFX-based desktop applications to facilitate pet adoption. The platform allows users to sign up, log in, search for pets, submit adoption requests, and manage a list of favorite animals. It also enables users to add new pets for adoption and automatically sends email notifications upon adoption requests. The user interface is built with JavaFX and SceneBuilder, and the application requires a separate pet server (also available in the developer's GitHub profile) to function. While the app includes core features like pet listings and email notifications, it currently lacks a built-in chat system for real-time communication between adopters and pet owners.

Tools: JavaFX, SceneBuilder

Link https://github.com/Syed-Eftasum-Alam/Pawsitive

#### **Currency-Converter**

Currency Converter is a lightweight command-line application developed in pure C . Designed for Windows systems, it offers real-time currency conversion using free APIs, enabling users to convert between various currencies, view historical exchange rates, and receive notifications on rate changes. The application supports features like viewing the highest rates from history and accessing full exchange rate histories. However, due to limitations of the free API used, historical data is restricted to the past year, and rates for volatile currencies like Bitcoin may not always be up-to-date. The project includes a MainMenu.c file for compilation, and utilizes external libraries such as rlutil and cJSON for enhanced functionality. It's a practical tool for users seeking a straightforward currency conversion utility without the need for a graphical interface.

Tools: C Programming Language, CLI (Command Line Interface)

Link <a href="https://github.com/ehsan18t/Currency-ConverterCurrency-Converter">https://github.com/ehsan18t/Currency-ConverterCurrency-Converter</a>

### HireHub

HireHub is a streamlined job platform connecting employers with qualified candidates quickly and efficiently. It offers intuitive job posting, smart candidate matching, and seamless application tracking to simplify the hiring process for businesses and job seekers alike

Tools: HTML, CSS, Java Script, Php, MySQL

Link https://github.com/Syed-Eftasum-Alam/HireHub

### SKILLS

#### **Programming**

C | C++ | java | python

**Development, Framework & Project Management Tool** 

HTML | CSS | Java Script | PHP | MySql | JavaFx | Flutter | Jira

**Technical Writing** 

Overleaf | Latex | MkDocs

**Basic Programs** 

Figma | Microsoft Word | Powerpoint | Microsoft Excel | Adobe Photoshop | Adobe Illustrator

#### HONOURS AND AWARDS

### Scholarship for Academic Excellence - United International University.

Achieved academic excellence with outstanding GPA performance throughout the academic year. Maintained a **CGPA** of **3.90** in Computer Science and Engineering program.

- Obtained 100% Scholarship in 5 Trimesters.
- Obtained 50% Scholarship in 3 Trimesters.
- Obtained 25% Scholarship in 4 Trimesters.

Link https://drive.google.com/file/d/1t3O5IMVXxydtAkKK77XdC365CMUyTmoG/view

# Achieved CCNA Badge: Introduction to Networks - Cisco Networking Academy

Completed The Introduction to Networks course which was arranged by **Cisco** & got full scholarship on that course. Passed the final exam obtaining 90% marks.

**Links** https://www.credly.com/badges/4b6eaea7-f63f-4d20-858c-03f3aa69ca25/public\_url | https://drive.google.com/file/d/1BKjiA5nNTNnMTxI7V5KxGEhwHM1o56l1/view

### **Project Show Champion Spring 2023 - United International University**

Compete against 30+ teams and we came out on top with our project in System Analysis and Design course.

Link https://drive.google.com/file/d/10OnAaUWEdhVje-I0ON9RX8I3KCMvkJEM/view

### RECOMMENDATIONS

Dr. Dewan Md. Farid Supervisor (Final Year Design Project)

Professor & Dean, School of Science & Engineering Southeast University

Email dewanfarid@cse.uiu.ac.bd

Raiyan Rahman Research Supervisor

Lecturer (On Leave),
Department of Computer Science & Engineering
United International University
United City, Madani Avenue, Dhaka 1212, Bangladesh

Email raiyan@cse.uiu.ac.bd

Dr. Md. Motaharul Islam Research Supervisor

Professor & Director - MSCSE, Department of Computer Science and Engineering, United International University, Dhaka, Bangladesh

Email motaharul@cse.uiu.ac.bd