Syed Eftasum Alam

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About Me

Computer Science graduate and university lecturer with expertise in team management, problem-solving, and exploring emerging fields like Artificial Intelligence and Deep Learning.

I am enthusiastic about embracing technological advancements and contributing to innovative solutions that address practical challenges. I believe in fostering an environment of curiosity, innovation, and collaborative learning, where people are encouraged to think critically and develop solutions to real-world problems.

Education

MSc in Computer Science and Engineering, Brac University   Oct 2025

BSc in Computer Science and Engineering, United International University   Jan 2020 – Jan 2024
- **CGPA:** 3.90 out of 4.0
- **Major:** Data Science

Higher Secondary School Certificate (HSC), Dhaka City College   2019
- GPA: 5.00 out of 5.00
- **Group:** Science

Secondary School Certificate (SSC), Savar Cantonment Public School   2017
- GPA: 5.00 out of 5.00
- **Group:** Science

Experience

Lecturer, Department of CSE, Daffodil International University   July 2024 – Present
- 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.

Instructor (Contractual Lecturer), Department of CSE, United International   Jan 2024 – July 2024
University
- 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.

Instructor (Structured Programming Language Special Class), United   Oct 2023 – Jan 2024
International University
- 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.

Undergraduate Teaching Assistant, Department of CSE, United International   Sept 2022 – Jan 2024
University
- 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.

Publications

An IoT-and cloud-based e-waste management system for resource reclamation with a data-driven decision-making process   2023

Collaborators : Abu Bakar Fahad, Mithila Farjana, Dr.Motaharul Islam

Paper Link: https://doi.org/10.3390/iot4030011

Publisher : MDPI

Journal : MDPI IoT

This research presents an integrated system leveraging 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.

Thought Scope: Human Cognitive Thinking Classification from Eye Position using Deep Learning and Digital Image Processing   2023

Collaborators : Abu Bakar Fahad, Mithila Farjana, Mr. Raiyan Rahman

Paper Link: 10.1109/ICCIT60459.2023.10441248

Publisher : IEEE Xplore

Conference : 2023 26th International Conference on Computer and Information Technology (ICCIT)

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 improve the accuracy of cognitive state recognition, providing a foundation for applications in human-computer interaction, assistive technology, and behavioral analysis.

Recyclable Waste Image Classification using Convolutional Neural Networks   2023

Collaborators : Abu Bakar Fahad, Mithila Farjana, Dr.Dewan Md Farid

Paper Link: 10.1109/ICCIT60459.2023.10441091

Publisher : IEEE Xplore

Conference : 2023 26th International Conference on Computer and Information Technology (ICCIT)

This research introduces an improved approach for classifying recyclable waste using Convolutional Neural Networks (CNNs) in combination with digital 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.

Advancing Individual Well-being: Fatigue Detection Enhancement using Deep Learning Models   2025

Collaborators : Mohammad Efaz Khondoker, Afsun Al Mayen, Mr. Raiyan Rahman

Paper Link: https://doi.org/10.1145/3723178.3723237

Publisher : Association for Computing Machinery(ACM)

Conference : ICCA '24: Proceedings of the 3rd International Conference on Computing Advancements

Led a study on AI-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.

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

Collaborators : Mr. Nahid Hossain, Mr. Tarek Rahman

Status : On Going

Projects

Art Patio <div align="right">Github Repository</div>

- 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 Used: HTML, CSS, Js, PHP, My SQL

HireHub <div align="right">Github Repository</div>

- 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 Used: HTML, CSS, Js, PHP, My SQL

Pawsitive <div align="right">Github Repository</div>

- 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 Used: JavaFx, Scenebuilder

Currency-Converter <div align="right">Github Repository</div>

- 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 Used: C programming Language

Technologies

Programming Language: C++, C, Java, Python

Development & Frameworks: HTML, CSS, SQL, PHP, Flutter, JavaFX

Scripting Language: Java Script, Bash

Technical Writing Tools: Overleaf, Latex, MKDocs

Software & Project Management Tools: Git, Github, Scenebuilder,Figma, Jira

Achievements

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 CSE program.

Achieved CCNA Badge of 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.

Project Show Champion Spring 2023 : United International University

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

English Proficiency Test Certification

Band : 7.0

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

View Certificate

References

Dr. Dewan Md. Farid
Professor & Dean, Southeast University
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Professor, United International University
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