



Kohinur Parvin

Passport: A03588034 | **Date of birth:** 16/09/1997 | **Place of birth:** Sirajganj, Bangladesh |

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ABOUT ME

To build my career as a teacher to spread the knowledge I have gained. To become enthusiastic, persevering, and confident enough to have my dream accomplished that always holds an affirmative impact on mankind. Honesty, Hard work, and Humbleness, these three 'H' are the impetus of me against all the obstacles in my way.

WORK EXPERIENCE

NETROKONA UNIVERSITY – NETROKONA - 2400, BANGLADESH

Business or Sector Education | **Department** Computer Science & Engineering | **Email** kohinur.parvin@neu.ac.bd |

Website <https://neu.ac.bd/>

LECTURER OF COMPUTER SCIENCE & ENGINEERING DEPARTMENT – 05/01/2025 – CURRENT

SONARGAON UNIVERSITY – DHAKA, BANGLADESH

Business or Sector Education | **Department** Computer Science & Engineering |

Address 147/l, Green Road, Panthapath, 1215, Dhaka, Bangladesh | **Website** <https://su.edu.bd/>

LECTURER OF COMPUTER SCIENCE & ENGINEERING DEPARTMENT – 05/09/2022 – 05/09/2024

EDUCATION AND TRAINING

01/01/2020 – 31/12/2020 Savar, Bangladesh

MASTERS IN COMPUTER SCIENCE AND ENGINEERING Jahangirnagar University

Website <https://juniv.edu/> | **Field of study** Computer Science & Engineering | **Final grade** 3.75 out of 4.00 |

Thesis Performance Analysis of Supervised Machine Learning Algorithms on Diabetes and Heart Disease Risk Prediction.

12/03/2016 – 30/06/2019 Savar, Bangladesh

BACHELOR IN COMPUTER SCIENCE AND ENGINEERING Jahangirnagar University

BSc in Computer Science and Engineering

Address Savar Union, 1342, Savar, Bangladesh | **Website** <https://juniv.edu/> | **Final grade** 3.69 out of 4.00 |

Thesis AMAR KOTHA: An Android Application on Bangla Augmentative and Alternative Communication (AAC) for Autism.

01/06/2013 – 09/08/2015 Sirajganj, Bangladesh

HIGHER SECONDARY SCHOOL CERTIFICATE Sirajganj Govt. College

Address Sirajganj, 6700, Sirajganj, Bangladesh | **Website** <https://www.srgc.edu.bd/> | **Field of study** Education science |

Final grade 5.00 out of 5.00

Address 6700, Sirajganj, Bangladesh | Website <http://www.sigghs.edu.bd/> | Field of study Education science |

Final grade 5.00 out of 5.00

LANGUAGE SKILLSMother tongue(s): **BENGALI**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	B2	B2	B2
GERMAN	A1	A1	A1	A1	A1

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

SKILLS

Java / Python / Java Script | Material Design in Android (Java) (Advanced) | Programming languages: Python, Java, C, C++, C#, Matlab, R, SQL, PL-SQL | Microsoft Office | Organizational and planning skills

PUBLICATIONS

2023

[Decoding Demographics on Generation Z's Post-Pandemic Shopping Trends: E-Commerce Evolution 4.0, the Digital Shopper's Dilemma, and Tailoring Strategies.](#)

Conducted a quantitative study on how demographic factors influence customer satisfaction and online purchase intentions among Generation Z university students in post-COVID-19 Dhaka. Collected data from 433 respondents using stratified random sampling and analysed results with IBM SPSS 25. Findings revealed significant links between demographics, customer satisfaction, and purchase intentions, offering valuable insights for digital marketing strategies.

2023

[Shanketik: Revolutionizing Communication for the Deaf and Mute - A Reinforcement Learning-Enhanced Bangla AAC Application.](#)

Developed "Shanketik", a Bangla-language AAC mobile application integrating Reinforcement Learning to improve communication for the deaf and mute community. A Deep Q-Network (DQN) model was used to create an adaptive system that learns from user feedback to enhance text and speech generation. The project advances accessibility and inclusivity by offering an intelligent, user-friendly communication tool tailored to underserved language contexts.

2023 26th (ICCIT) 13-15 December, Cox's Bazar, Bangladesh.

2025

[Assessing the Effectiveness of Supervised Learning Models in Predicting Risks of Diabetes and Cardiovascular Disease with Explainability Analysis.](#)

We collected diabetes and heart disease datasets from Kaggle and supplemented them with real data from 30 patients. Several machine learning algorithms, including Decision Tree, Random Forest, SVM, and KNN, were applied to evaluate performance. The primary objective of this research was to identify the most accurate model for detecting diabetes and heart disease.

Journal Name: International Conference on Data Science, AI an Application | Publisher: Springer

2025

[Computationally Efficient Explainable AI Framework for Skin Cancer Detection](#)

This research presents an optimised hybrid framework combining deep learning and machine learning for efficient and accurate skin cancer detection. Five CNNs, seven ML models, and three optimisation techniques were evaluated, with the **MobileNetV2 + LDA + LR** model achieving **99.33% accuracy, 99.47% precision, 97.33% recall**, and an **F1-score of 98.31%**. Explainable AI methods (**Grad-CAM++** and **LIME**) were applied to enhance model transparency and highlight clinically relevant regions. The proposed framework offers a reliable, interpretable, and resource-efficient AI solution for early skin cancer diagnosis and clinical decision support.

Under Review

Journal Name: Advances in Science, Technology and Engineering Systems Journal (ASTESJ)

2025

State-of-the-Art Review and Future Directions in Artificial Intelligence-Based Detection of Brain Tumors Using MRI Datasets

Conducted a comprehensive study on AI-based brain tumor detection using MRI data, analysing methods such as Machine Learning, Deep Learning, Federated Learning, Knowledge Distillation, and Large Language Models. Emphasised Explainable AI (XAI) for clinical transparency and trust. Reviewed major datasets (BRATS, Kaggle, clinical sources) and evaluation metrics like accuracy, precision, and F1-score. The study offers an integrated perspective on algorithmic performance and future directions for advancing AI-driven medical diagnosis.

Future work

2025

Enhancing MRI-Based Brain Tumor Detection through Deep Learning and Transformer Models with Explainable AI.

We collected approximately 2,600 real-time MRI brain tumor images from various hospitals across Bangladesh. The dataset was categorised into two classes: *Yes Tumor* and *No Tumor*. Three optimisation techniques, Adam, SGD, and RMSprop and ten advanced deep learning transfer learning models, including EfficientNet-B0, MobileNetV2, DenseNet121, VGG16, and ResNet50, were applied to identify the best-performing model. Finally, explainable AI (XAI) techniques such as LIME and Grad-CAM were employed to enhance the model's interpretability and transparency.

Future Work

● RECOMMENDATIONS

Dr. Md. Ezharul Islam Professor, Department of Computer Science and Engineering, Jahangirnagar University

I would like to highlight Kohinur Parvin's exceptional academic performance, technical skills, and research capabilities, particularly in Mobile Application Development and data analysis tools, as well as programming languages such as Python, MATLAB, and R. She demonstrated creativity, perseverance, and excellent communication skills throughout her undergraduate studies, impressing me with her passion for research. I wholeheartedly endorse her for the graduate program, confident that she will excel in her future studies in Computer Science.

Email ezharul.islam@juniv.edu | **Phone** (+880) 1816203074

Dr. Md. Humayun Kabir Professor, Department of Computer Science and Engineering, Jahangirnagar University

Kohinur Parvin is an exceptionally bright, resourceful, and innovative student with strong programming skills and a passion for learning new technologies. I highly recommend her for admission and scholarship opportunities, noting her outstanding academic performance, enthusiasm, and positive attitude.

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