Md Rumman Shahriar

+8801933264654 | rummanshahriarrumman@gmail.com | linkedin.com/in/rumman | github.com/rumman Research Interests: Natural Language Processing, Machine Learning, Image Processing, Computer Vision

OBJECTIVE

Computer Science graduate with a strong foundation in data analysis and machine learning, eager to apply analytical and technical skills to support customer life cycle management initiatives. Passionate about continuous learning and motivated by challenges, with the drive to transform data insights into practical strategies that enhance customer engagement and business value at bKash.

EXPERIENCE

Student Tutor
BRAC University

Oct. 2024 - May 2025

Dhaka, Bangladesh

- Assisted students in understanding fundamental programming concepts in ${\bf CSE110:\ Programming\ Language\ I}$

- Conducted one-on-one and group tutoring sessions to improve problem-solving and coding skills
- Provided guidance on assessments, debugging techniques, and optimal code writing

EDUCATION

• Bachelor of Science in Computer Science BRAC University, Dhaka CGPA: 3.96/4.00 2021 - 2025

• Higher Secondary Certificate (HSC)

GPA: 5.00/5.00

Notre Dame College, Dhaka

GPA: 5.00/5.00

• Secondary School Certificate (SSC) Adarsha School, Narayanganj

2018

2020

Academic Projects

Hospital Management System

Oct. 2024 - Feb. 2025

- Domain: Web Application Development Tools: Flask, MySQL, HTML, CSS, Figma, Vercel
- Designed and developed a web application for managing patients, doctors, appointments, and billing
- Implemented backend with Flask and MySQL, and deployed frontend on Vercel
- Ensured responsive design and user-friendly UI with HTML, CSS, and Figma prototypes
- Links: GitHub | Documentation

An Efficient Deep Learning Model for Bangla Handwritten Digit Recognition

Apr. 2025 – Jun. 2025

- Domain: Computer Vision Tools: Python, TensorFlow/Keras, CNN
- Built and trained a CNN for classifying Bangla handwritten digits
- Achieved high accuracy using data preprocessing and hyperparameter tuning
- Links: GitHub | Paper

Breast Ultrasound Image Segmentation & Classification

Jan. 2025 – Jul. 2025

- Domain: Medical Imaging Tools: Python, TensorFlow/Keras, U-Net
- Applied U-Net architecture for segmentation of breast ultrasound images
- Performed classification to differentiate benign and malignant tumors
- Links: GitHub | Architecture

Tumor Detection for Potential Breast Cancer Using ML

Oct. 2024 – Dec. 2024

- Domain: Pattern Recognition Tools: Python, Machine Learning
- Implemented ML models for early detection of breast cancer tumors
- Built awareness through predictive analytics and visualization
- Links: GitHub | Paper

Comparative Analysis of Early Kidney Disease Detection Using ML Models Jan. 2024 – Mar. 2024

- Domain: Healthcare Analytics Tools: Python, Scikit-learn, SVM, Random Forest, KNN, DNN
- Conducted a comparative study of ML models for chronic kidney disease detection
- Evaluated models based on accuracy, precision, recall, and F1-score
- Links: GitHub | YouTube | Paper

Alien Shooter Game Apr. 2024 – Jun. 2024

- Domain: Game Development Tools: Python, OpenGL, GLUT
- Developed a 2D space shooter game with alien enemies, power-ups, and life management
- Implemented dynamic projectile mechanics, collision detection, and multiple power-ups
- Designed interactive UI elements and smooth gameplay using OpenGL graphics primitives
- Links: GitHub | Game Manual

TECHNICAL SKILLS

Microsoft Office & Productivity: Microsoft Excel, PowerPoint, Microsoft Word, Slack

Languages: Python, Java, MySQL

Web Development: HTML, CSS, Bootstrap, PHP, MySQL, Flask

Artificial Intelligence & Machine Learning: Scikit-learn, Pandas, NumPy, Matplotlib

Neural Networks & Deep Learning: Python, TensorFlow, Keras

Computer Vision: Convolutional Neural Networks (CNNs), U-Net, Image Processing

Natural Language Processing: NLTK, Text Classification, Language Modeling, Tokenization, Parsing

Other Tools: Git, GitHub, VS Code, LaTeX

Honors & Awards

Vice Chancellor's List

For outstanding academic performance at BRAC University.

Dean's List

For obtaining a CGPA above 3.9 in 10 semesters at BRAC University.

Merit-Based Scholarship

Received 75-100% waiver on tuition fees at BRAC University.

Dhaka Board General Scholarship (SSC)

Scholarship awarded for outstanding performance in the Bangladesh Secondary School Certificate examination.

Dhaka Board Talent Pool Scholarship (JSC)

Scholarship awarded for outstanding performance in the Bangladesh Junior School Certificate examination.

Competitions & Achievements

Executive Member (HR Department), Notre Dame College Eco and Space Club 2018 – 2020 Successfully organized National Space Fest 2.0, catering to approximately 4,000 participants.

School Attendance System Project 2017 – 2018

Won **Second Prize** in the Digital Udbhaboni Mela for developing the project.

National Science Fair 2016 – 2017

Secured **Second Place** in the Narayanganj region, competing against 24 teams.