Abu Al Shahriar Rifat

Date of birth: 30/11/1998

Place of birth: Jamalpur, Bangladesh

Nationality: Bangladeshi

Gender: Male

Contact

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europass

ABOUT MYSELF

I am a detail-oriented researcher specializing in **computer vision**, with a strong focus on **medical imaging**, **digital healthcare**, and **cancer research**. I hold a Master's degree in **Transportation Engineering**, which gives me a unique perspective. I combine analytical thinking from engineering with advanced deep learning techniques to solve complex problems in healthcare.As a beginner researcher, I am passionate about working on high-impact projects that connect technology with real-world medical applications.

EDUCATION & TRAINING

01/09/2025 - 31/07/2028 Nanjing, China

Msc in Transpotation Engineering Hohai University

Final grade: 86/100 | **Level in EQF:** EQF level 7

01/08/2019 - 01/10/2023 Grater Noida, India

Bsc in Information Technology Sharda University

Final grade: 63.3/10 | **Level in EQF:** EQF level 6

WORK EXPERIENCE

Hohai University Nanjing, China

Email: lx20250504003@hhu.edu.cn

Graduate Research Assistant

01/03/2026 - Current

Supervisor: Professor Xu Peng

Institution: Hohai University, Jiangling Campus, Nanjing, China

Focus: Road Damage Detection & Segmentation | Intelligent Transportation Systems

- Developed deep learning models with **TensorFlow** and **Keras** for road damage detection and segmentation, implementing **UNet** and **Mask RCNN** to classify cracks, potholes, and rutting.
- Managed endtoend data pipeline including image annotation, preprocessing, and augmentation to ensure highquality datasets for model training.
- Built machine learning models for traffic behavior analysis and implemented computer vision algorithms for vehicle detection using **OpenCV**
- Authored research papers, presented findings, collaborated with interdisciplinary teams, and assisted in supervising undergraduate researchers.

ResearchBuddy Ai Dhaka, Bangladesh

Research Assistant

01/01/2026 - Current

- Developed and implemented deep learning models using TensorFlow and Keras for sleep apnea detection from physiological signals such as ECG, EEG, and respiratory data.
- Preprocessed and analyzed large-scale biomedical datasets, including

signal filtering, normalization, and feature extraction to enhance model accuracy and reliability.

- Applied explainable AI techniques (Grad-CAM, SHAP) to interpret model predictions, ensuring transparency and clinical relevance in sleep disorder diagnosis.
- Collaborated with healthcare researchers to validate model performance, contributed to research publications, and presented findings on AI-driven sleep apnea detection.

SKILLS

Python | machine learning | Deep Learning | Computer Vision | Image Processing | Medical Image Processing | Tensorflow | OpenCV | Git | Matplotlib | Pandas | Scikit-Learn | Artificial Intelligence | Explainable Ai | Image Detection | Image Classification | Image Segmentation | React | Javascript | Django | Flask

LANGUAGE SKILLS

MOTHER TONGUE(S): Bengali
OTHER LANGUAGE(S):

English

Listening C1
Reading C1
Writing C1
Spoken production C1
Spoken interaction C1

Chinese

Listening A2
Reading A2
Writing A1
Spoken production A2
Spoken interaction A2

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

COURSES

- **Complete Python Programming Course**
- **Winter Interview Preparation of duration 8 weeks.**
- **Machine Learning and Image Processing**
- **Artificial Intelligence(Elements of AI)**
- **Artificial Intelligence in Digital Marketing**
- **Python Django,React&Ai**
- **Ai Engineering Bootcamp**
- **Data Science and Machine Learning With Python**

CERTIFICATIONS

Neural Research, 01/02/2026

- **Advance Research Career in Machine Learning & XAI**

  Pursuing an advanced research career focused on developing **interpretable and transparent machine learning models**that bridge the gap between high performance and human understanding. Specializing in **Explainable AI (XAI)** techniques such as Grad-CAM, LIME, and SHAP to make deep learning decisions more

accountable and trustworthy. Aiming to apply these methodologies in **critical domains like medical imaging and digital healthcare**, where model transparency is essential for clinical adoption and ethical AI deployment.

Mode of Learning Online

Neural Research, 01/01/2026

Learn to Conduct Research with Image Processing, Deep Learning, & Explainable AI

Focused on building strong research foundations in **image processing** and **deep learning** to develop intelligent systems for real-world applications. Gaining expertise in **explainable AI (XAI)** techniques to make deep learning models more transparent, interpretable, and trustworthy. Committed to mastering research methodologies including experimental design, literature review, and scientific writing to contribute impactful innovations in **medical imaging and digital healthcare**

Mode of Learning Online

PROJECTS

Automated Number Place Detection Using TensorFlow and Keras

Crop Yield Prediction Using Random Forest Algorithm

Weather Application Using Flask Framework

Ecommerce Customer Behavior Analysis Using Machine Learning

Brain Tumour Classification and Detection Using TensorFlow, Keras, and Explainable AI

CONFERENCES & SEMINARS

09/10/2025 - 11/10/2025 Hohai University, Jiangning Campus, Nanjing, China

CCF 18th International Conference

PUBLICATIONS

Automatic Fake News Identification through Sequential Text Modeling with LSTM

2026 IEEE 2nd International Conference on Quantum Photonics, Artificial Intelligence & Networking (QPAIN) · Feb 16, 2026

Type of Submission: Conference PaperSubmitted Paper ID: 6528

Distinguishing Human and AI-Generated Text: A BiLSTM-Based Deep Learning Approach

2026 IEEE 2nd International Conference on Quantum Photonics, Artificial Intelligence & Networking (QPAIN) · Jan 3, 2026

Type of Submission: Conference PaperSubmitted Paper ID: 3650

Leveraging Deep Learning for Ovarian Cancer Classification Using Image Data

International Conference on Intelligent Data Analysis and Applications (IDAA 2025) · Nov 25, 2025

Type of Submission: Conference PaperSubmiited Paper ID: 10749