

JASMIN JAHAN PUSPO

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EDUCATION

Master's in Computer Science and Engineering

Shahjalal University of Science & Technology

Jan. 2023 – Oct. 2025 (Expected)

CGPA: N/A (in progress)

Bachelor's in Computer Science and Engineering

North East University Bangladesh

Jan. 2017 – Jun. 2021

CGPA: 3.54 / 4.0

RESEARCH INTERESTS

• Medical Imaging • Computer Vision • Machine Learning

PUBLICATIONS

Journal

- TransembleNet: Enhancing vector **mosquito species** classification through transfer learning-based ensemble model. *Plos One (Q1)*, 2025 🔗

Conference (First Author)

- BengaliTaka: A Comparative Analysis of Transformer and CNNs on **Bangladeshi Currency** Recognition. *QPAIN 2025* 🔗
- SkinNet: An EnsembleNet Technique to Detect **Skin Cancer** Using Pre-Trained Models. *ECCE 2025* 🔗
- A Novel Approach to Classify **Breast Cancer** Using Transfer Learning. *ICCIT 2024* 🔗

MANUSCRIPTS UNDER REVIEW

(First Author)

Journal

- Bangla Taka Recognition Using Transformer Architectures and XAI: A **Novel Dataset** and State-of-the-Art Analysis. *IEEE Access (Q1)*, 2025.

Conference

- Attention-Based CNN Architectures for Automated Binary Classification of Salmon **Fish Diseases**. *WIECON-ECE 2025*

ACADEMIC THESIS

One Stage Detection, Segmentation, Shape, and Stage Classification in **Digital Mammography**. *Undergraduate Thesis, NEUB* | 2021

TECHNICAL SKILLS

Programming Language: Python

Deep Learning: CNNs, Transformers, Foundation Models

Framework : TensorFlow, Keras

Data Analysis: Pandas, Scikit-learn, OpenCV

Data Annotation : Labellmg, VGG Image Annotator

Tools: Git, JIRA

RESEARCH EXPERIENCE

Research Collaborator

Elite Lab | Remote

Sep. 2025 - present

Dhaka, BD

- Conducting research on **chest disease** detection using Transformer models with explainable AI (XAI).
- Collaborating with lab team to develop innovative research methodologies, improving efficiency and accuracy.

AI Researcher

SafeNet.AI | Remote

Jan. 2025 - Jun. 2025

Dhaka, BD

- Implemented attention-based CNN models for classifying **fish diseases** into healthy and infected classes, focusing on XAI techniques to explain model predictions.

Volunteer Research Intern | Remote

Sep. 2023 – Feb. 2024

- Analyzed experimental results and authored the literature review for a study on **mosquito diseases**.
- Summarized from recent research papers and wrote a literature review catalog template

PROFESSIONAL EXPERIENCE

ML Engineer

NxtVis | Remote

Feb. 2025 - Apr. 2025

Dhaka, BD

- Developed and optimized deep learning models for real-time **video anomaly** detection, improved dataset quality.

Content Writer

Russkin Bright | Hybrid

Oct. 2022 - May 2023

Sylhet, BD

- Researched and created engaging **curriculum, book chapters**, and MCQ for various courses.
- Wrote sales content of 300-450 words by maintaining 100% quality and zero plagiarism.

TEACHING EXPERIENCE

ICT Lecturer | (9th – 12th) grade

Women's Model College

Feb. 2024

Sylhet, BD

- Was responsible for daily 40-minute multimedia classes and delivered up to **four lectures** per day.
- Conducted classes covering technological topics, including theoretical coursework, and programming languages.

ICT Teacher | (3rd – 8th) grade

Sylhet International School and College

Sep. 2022 - Dec. 2022

Sylhet, BD



- Prepared lesson plans including laboratory class, lecture, exam, and homework.
- Graded assignments, tests, and lab work, providing feedback to help students improve academically.

Peer Tutor | (3rd – 12th) grade

May 2013 – Jun. 2024

- Designed lesson plans and materials to simplify concepts, enhancing student understanding and engagement.
- Assisted students with college admissions, supporting them in securing placements at reputable colleges.

DATASET COLLECTIONS

- Bengali Paper Currency 
- Bengali Sign Language 

STANDARDIZED TEST RESULTS

- IELTS Academic: Overall **6.0** (L: 6.0 | R: 6.5 | W: 5.5 | S: 6.0)

ACADEMIC SERVICE

- Conference Reviewer: **ICCIT 2025**