

PRITOM PAUL

Sylhet, Bangladesh | (+880)1718382009 | pritompaul.cse@gmail.com

GitHub: PritomPaul99 | LinkedIn: pritompaul1920

EDUCATION

North East University Bangladesh

B.Sc. (Engineering), Department of Computer Science and Engineering

Sylhet, Bangladesh

May 2024

CGPA: 3.71/4.00

RESEARCH INTEREST

- Deep Learning
- Natural Language Processing (NLP)
- Computer Vision (CV)
- Large Language Model (LLM)
- Artificial Intelligence (AI)
- Big Data Analysis

RESEARCH EXPERIENCE

Handwritten Bangla Word Recognition Through Image-to-Sequence Extraction

Undergraduate Thesis, North East University Bangladesh.

January 2023 – December 2023

- Advisor:** Tasnim Zahan
- Designed and trained an Image-to-Sequence OCR model for handwritten Bangla word recognition.
- Built a CNN–BiLSTM architecture in Python/TensorFlow with a CTC-based sequence decoder.
- Collected, curated, and preprocessed 19,066 handwritten samples from CMATERdb, BanglaWriting, and self-generated data.
- Reached accuracy of 93.71%, demonstrating strong generalization even with a modest dataset size.

TEACHING EXPERIENCE

North East University Bangladesh

Adjunct Faculty, Department of Computer Science and Engineering.

Sylhet, Bangladesh

January 2025 – Present

- Teach core undergraduate courses including **Compiler Construction**, **Compiler Construction Lab**, **Software Engineering and Design Patterns**, **Software Engineering and Design Patterns Lab**, **Numerical Analysis**, **Numerical Analysis Lab**, **Introduction to Statistics**, and **Introduction to Computer Applications**.
- Instruct and mentor more than 200 students across multiple semesters, emphasizing conceptual clarity, problem-solving, and hands-on practice.
- Develop lectures, lab modules, and assessments aligned with program objectives and industry-relevant practices.

PROFESSIONAL EXPERIENCE

101 BD TECH

Software Engineer (Full Time)

Jamalpur, Bangladesh

July 2024 – December 2024

- Built core components of a WebRTC-powered Learning Management System for both web and desktop platforms.
- Wrote clean, efficient code in Python and JavaScript, and improved system performance through debugging and optimization.
- Designed scalable application modules and implemented backend integrations using SQL and NoSQL databases.
- Maintained technical documentation, collaborated within the SDLC workflow, and managed version control using Git.

VOLUNTEER EXPERIENCE

North East University Bangladesh CSE Society

Associate Programming Instructor

January 2021 – December 2023

- Instructed approximately 100 junior undergraduate students in programming languages (C/C++, Python), data structures, algorithms, and problem-solving.
- Spearheaded the organization of 3-4 programming contests and actively participated in problem development.

COMPETITIVE PROGRAMMING EXPERIENCE

- ICPC Asia Dhaka Regional Contest – 2021 | Team: NEUB_TeamXero
- ICPC Asia Dhaka Regional Contest – 2022 | Team: NEUB_TeamXero
- ICPC Asia Dhaka Regional Contest – 2023 | Team: NEUB_Believers
- NCPC ONSITE – 2023 | Team: NEUB_Believers

PROJECTS

TripIt (Web Application)

- Used HTML, CSS, PHP, JavaScript & MySQL.
- Features: Login, registration, find travel destinations, book hotels, blog, etc.
- Source Code: https://github.com/PritomPaul99/TripIt_SEProject

Handwritten English Word Recognition (Machine Learning Project)

- Used CNN, RNN (Bi-LSTM), CTC Loss, etc.
- Recognizes handwritten English words. Takes a single-word image as input and predicts the written word in the image.
- Source Code: <https://github.com/PritomPaul99/Handwritten-English-Word-Recognition-Using-CNN-RNN-Model>

STANDARDIZED TEST SCORE

International English Language Testing System (IELTS)

08 February 2025

Listening	Reading	Writing	Speaking	Overall Band Score
9.0	6.5	6.0	7.0	7.0

SKILLS SUMMARY

- **Programming Languages:** C/C++, Python, Java, JavaScript, PHP, Go.
- **Web Development:** HTML, CSS, Bootstrap, Tailwind CSS, React, Node.js.
- **Machine Learning:** Deep Learning, Computer Vision, TensorFlow, Keras, Scikit-learn, PyTorch, etc.
- **Database Management System:** MySQL, MongoDB.
- **Tools:** Git, Github, Jira, Figma, LaTeX.
- **Others:** Object Oriented Programming (OOP), Software Development Life Cycle (SDLC).

REFERENCE

Dr. Mohammad Shahidur Rahman

Professor

Department of Computer Science and Engineering
Shahjalal University of Science and Technology
Sylhet-3114, Bangladesh
Email: rahmanms@sust.edu

Tasnim Zahan

Assistant Professor

Department of Computer Science and Engineering
North East University Bangladesh, Sylhet
Telihaor, Sheikhghat, Sylhet-3100
Email: tzahan@neub.edu.bd

Al Mehdi Saadat Chowdhury

Assistant Professor

Department of Computer Science and Engineering
North East University Bangladesh, Sylhet
Telihaor, Sheikhghat, Sylhet-3100
Email: amschowdhury@neub.edu.bd

Shahadat Hussain Parvez

Assistant Professor

Department of Computer Science and Engineering
North East University Bangladesh, Sylhet
Telihaor, Sheikhghat, Sylhet-3100
Email: shparvez@neub.edu.bd