Ariful Islam

✉ arif.cuet129@gmail.com   📞 (+880)-1908779743   📍 Dhaka, Bangladesh   ⬡ GitHub   in LinkedIn

EDUCATION

Chittagong University of Engineering and Technology-CUET 🔗   02/2020 – 06/2025
B.Sc. in Computer Science & Engineering (CSE)
CGPA: 3.61 / 4.00
Thesis on "Aspect-Based Sentiment Analysis with Triplet Extraction: A Study on Bangla Product Reviews"

RESEARCH INTEREST

• Machine Learning   • Deep Learning   • Natural Language Processing (NLP)

EXPERIENCE

- **May'2023- Feb'2024 | Machine Learning Engineer | Diligite Ltd.**   *Remote*
  Worked as an ML Engineer, assisting in building and optimizing machine learning models for real-world applications.

- **June'2022– Feb'2023 | Full Stack developer | CSE Dept. Project, CUET**
  Worked as a mid-level web app developer, focusing on user-friendly design, security enhancements, bug fixes, performance optimization, and collaborative code reviews for continuous improvement.

- **Nov'2021 –Mar'2022 | Front End developer | Code Zone, Bangladesh.**   *Remote*
  Worked as a junior web developer, building E-commerce sites with admin panels and ensuring responsive, cross-browser-compatible designs through close collaboration with developers and designers.

- **Feb'2024- June'2025 | Research Assistant (Under the Supervision of Supervisor)**
  Working under the supervision of a professor on NLP, ML, and DL projects, with a focus on large language models, multimodal systems, and generative NLP techniques.

- **Mar'2025 –Mar'2025 | Software Engineering Intern | SELISE Digital Platforms**
  Completed a one-month internship at a software engineering company, contributing to coding, debugging, and feature development tasks.

PUBLICATIONS

1. [J-1] **BAN-ASTE: A Unified Neural Framework for Bengali Aspect Sentiment Triplet Extraction** *[Submitted to a Journal]*

2. [C-1] **CUET's_White_Walkers@LT-EDI2025:Transformer-Based Model for the Detection of Caste and Migration Hate Speech** *[Accepted, LTEDI'25]*

3. [C-2] **CUET's_White_Walkers@LT-EDI2025:Racial Hoax Detection in Code-Mixed on Social Media Data** *[Accepted, LTEDI'25]*

4. [C-3] **BanglaSentNet: A Hybrid Deep Learning Framework for Multi-Aspect Sentiment Analysis in Bangla E-Commerce Reviews** *[Accepted, ICDSAIA'25]*

5. [C-4] **BanglaMM-Disaster: A Multimodal Transformer-Based Deep Learning Framework for Multiclass Disaster Classification in Bengali** *[Under Review, ICMCEL'25]*

6. [C-5] **Enhancing Bangla Fake News Detection with a Multichannel Approach** *[Under Review, BIM'25]*

7. [C-6] **Cyberbullying Detection in Bengali: A Transformer-Based Explainable AI Approach** *[Under Review, BIM'25]*

PROJECTS

- *ML/DL/NLP Projects:*

  1. **Stock Price Prediction System** 🔗

     Technologies: Python, Scikit-learn, Pandas, NumPy, Matplotlib, Time Series Analysis

  2. **AI-Powered Book Recommendation Engine** 🔗

     Technologies: Python, OpenAI, NLP, Collaborative Filtering, Content-Based Filtering

  3. **Medical Diagnosis Support System** 🔗

     Technologies: Python, TensorFlow, Scikit-learn, Medical Dataset Analysis, Classification

  4. **Automated Loan Approval Predictor** 🔗

     Technologies: Python, Random Forest, Logistic Regression, Feature Engineering, Data Preprocessing

  5. **Intelligent Conversational Chatbot** 🔗

     Technologies: Python, NLP, NLTK, Transformers, Intent Recognition, Entity Extraction

  6. **Email Spam Classification System** 🔗

     Technologies: Python, Naive Bayes, SVM, Text Mining, Feature Extraction, Scikit-learn

  7. **PC Price Estimation Model** 🔗

     Technologies: Python, Regression Analysis, Feature Engineering, Web Scraping, Data Analysis

  8. **Vehicle Price Prediction System** 🔗

     Technologies: Python, Machine Learning, Regression Models, Data Visualization, Market Analysis

  9. **Product Review Multi-Label Classifier** 🔗

     Technologies: Python, Multi-Label Classification, BERT, Text Analysis, Sentiment Analysis

  10. **Review Triplet Extraction System** 🔗

      Technologies: Python, Named Entity Recognition, Information Extraction, NLP, Deep Learning

- **WebApp Projects:**

  1. **Hall management WebApp | GitHub:** Frontend 🔗 Backend 🔗

     Developed a MERN-based web application to manage student hall activities, room allocations, and administrative tasks.

  2. **E-commerce WebApp | GitHub:** Code 🔗

     Built a full-stack e-commerce platform using the MERN stack with features like product browsing, cart management, and secure checkout.

  3. **Skill Share WebApp | GitHub:** Frontend 🔗 Backend 🔗

     Created a MERN-based platform for users to share and enroll in skill-based courses, enabling peer-to-peer learning.

TECHNICAL SKILLS

- **Programming Languages:** Python, C, C++
- **Machine Learning:** TensorFlow, PyTorch, scikit-learn, Keras
- **Data Processing & Analysis**: Pandas, NumPy, SciPy
- **Deep Learning:** Neural Networks, CNNs, RNNs, LSTMs
- **Natural Language Processing (NLP):** BERT, NLTK, SpaCy
- **Data Visualization:** Matplotlib, Seaborn
- **Deployment:** Flask
- **Version Control:** Git, GitHub
- **Databases:** MySQL, MongoDB, Firebase
- **Web & Frontend Tools:** React.js, Next.js, Tailwind CSS, HTML, CSS, Node.js, Express.js
- **Large Language Models (LLMs):** Basic Understanding
- Good knowledge in Object Oriented Programming (OOP), Data Structures, Algorithms & Database

ONLINE COURSES

Data Analyst In Python (Dataquest.IO 🔗)

DeepLearning.AI 🔗 TensorFlow Developer (Coursera)
Machine Learning (Stanford University)
Natural Language Processing in TensorFlow (Coursera)
Convolutional Neural Networks in TensorFlow (Coursera)
100 Days of Machine Learning (CampusX)
100 Days of Deep Learning (CampusX)
Natural Language Processing (CampusX)

COMPETITIVE PROGRAMMING

- **Online Judges Handles:** Codeforces 🔗   LeetCode 🔗
- Solved more than 900+ problems on various online judge platforms.

CERTIFICATIONS & ACHIEVEMENTS

- **Technical Poster Presentation – Faculty Competition (CUET, 2024)**
   Achieved *2nd Runner-Up* in a technical poster presentation competition at the faculty level, demonstrating research innovation and effective communication of complex technical ideas.
- **BD Mobile Apps Idea Competition – 2022**
   Received certification for participating in the BD Mobile Apps Idea Competition 2022, showcasing creativity and technical understanding in mobile app development.
- **Certified under BD First Research Fair – 2023 (CUET)**
   Awarded certification for presenting a model research project at CUET's BD First Research Fair 2023, recognized for outstanding research contribution and project quality.
- **Best Volunteer Award – ECE Faculty Conference (CUET, Jan 2025)**
   Honored with the *Best Volunteer Award* for outstanding support and organizational contributions during the ECE Faculty Conference at CUET.

CO-CURRICULAR ACTIVITIES AND LEADERSHIP

- **CUET Computer Club | Feb'21 - Feb'25**
   i. Executive Member (2 years)
   ii. Research Coordinator (1 year)
   iii. Joint General Secretary (1 year)
- **CUET Career Club | May'21 - May'24**
   i. Executive Member (2 years)
   ii. Assistant Secretary (1 year)
- **CUET MUN Club | June'23 - June'24**
   i. Executive In-Charge (Research) (1 year)
- **Green for Peace, CUET | April'22- April'24**
   i. Volunteer Member (1 year)
   ii. Finance Secretary (1 year)
- **Student Volunteer, 4th International Conference on Electrical, Computer and Communication Engineering (ECCE-2025)**