

Mohammed Abdul Al Arafat Tanzin

📍 Dhaka, Bangladesh ✉ tanzinabdul@gmail.com ☎ +880 1795 064368 🌐 Visit My Website [↗](#)
in [linkedin profile](#) [Github](#) [Google Scholar](#)

Personal Statement

A fast learner passionate about creating useful solutions and driving revolutionary change. Skilled in Machine Learning, AI, and NLP, with hands-on experience in emotion detection and sentiment analysis. Always eager to learn and innovate, I aim to leverage technology to improve lives and empower communities. Seeking opportunities to grow and make a meaningful impact.

Skill Summary

- **Programming Languages:** Python, C
- **Machine Learning & AI:** Regression, Classification, Deep Learning, NLP, Large Language Models (LLMs)
- **Frameworks & Tools:** TensorFlow, PyTorch, Scikit-learn, Pandas, Numpy
- **Data Analysis & Visualization:** Matplotlib, Seaborn
- **Databases:** MySQL, Sqlite
- **Web Development:** Flask, Django
- **Version Control:** Git, GitHub
- **Soft Skills:** Problem-solving, Adaptability, Team Collaboration, Leadership

Education

BSc	BRAC University Bachelor of Science in Computer Science & Engineering CGPA: 3.61/4.0 (Final semester)	June 2021 – June 2025 Dhaka, Bangladesh
HSC	B A F Shaheen College Higher Secondary Certificate (HSC), Science GPA: 5.00/5.00	Passing Year 2021 Chattogram, Bangladesh
SSC	Chattogram Ideal High School Secondary School Certificate, Science GPA: 5.00/5.00	Passing Year 2018 Chattogram, Bangladesh

Experience

- HOMELAND LIFE INSURANCE LIMITED**, Data Analyst *Dhaka, Bangladesh | August 2023 – Present*
- Forecasted company growth and optimized data-driven strategies, contributing to a 17% increase in underperforming regions.
 - Developed machine learning models to analyze historical data and improve customer segmentation.

Publications (C = Conference, J = Journal)

- [J.1] **Advanced Neural Network Architectures for Tomato Leaf Disease Diagnosis in Precision Agriculture.**
Discover Sustainability- Q2 Journal
Shashi Kant, Hritwik Ghosh, Irfan Sadiq Rahat, Md. Mintajur Rahman Emon, Md. Jisan Mashrafi, **Mohammed Abdul Al Arafat Tanzin**, Sachi Nandan Mohanty
Status: Accepted (Dec 2024), link will be available soon [PDF](#) [↗](#)
- [C.1] **Forecasting Literacy Development in Bangladesh: A Comparative Study of Machine Learning and Hybrid Approaches.** *ECCE 2025*
Mohammed Abdul Al Arafat Tanzin, Md. Jisan Mashrafi, Muhammad Iqbal Hossain
Status: Accepted (Feb 2025), link will be available soon, [Dataset Link](#) [↗](#) [Certificate](#) [↗](#)
- [C.2] **PhishVQC: Optimizing Phishing URL Detection with Correlation Based Feature Selection and Variational Quantum Classifier.** *ISACC 2025*
Md. Farhan Shahriar, Gazi Tanbhir, Abdullah Md Raihan Chy, **Mohammed Abdul Al Arafat Tanzin**, Md. Jisan Mashrafi
Status: Accepted [↗](#), Publication link will be available soon [↗](#) [Certificate](#) [↗](#)

[C.3] **Hybrid Convolutional Neural Network and Random Forest Model for Predicting Water Level Fluctuations in Kaptai Reservoir to Enhance Water Resource Management.** *ECCE 2025*
Anik Sarkar, Md. Farhan Shahriar, Abdullah Md Raihan Chy, **Mohammed Abdul Al Arafat Tanzin**, Md. Jisan Mashrafi, Abrar Fahim
Status: Accepted (Feb 2025), link will be available soon **Certificate** [↗](#)

Projects

[P1] **ClusSumm: A Hybrid and Clustering-Based Approach for Concise and Quality-Preserved Summarization of Online Course Reviews** (Jan 2025)

Developed ClusSumm, a hierarchical clustering-based NLP framework, to summarize learner feedback across domains (AI, ML, Cybersecurity, Web Development) with 12.65% summarization ratio, outperforming state-of-the-art models and enabling actionable insights for online education platforms.

Status: Completed and being submitted in a journal

Pre-print Paper Link [↗](#)

Dataset Link [↗](#)

[P2] **Mitigating Misleading Metrics: A Hybrid Model for Accurate Audience Sentiment Analysis** (Dec 2024)

Developed a hybrid ML framework combining sentiment analysis of user comments with engagement metrics to mitigate misleading like/dislike ratios, providing a reliable and transparent assessment of audience sentiment for digital content.

Status: Completed

Pre-print Paper Link [↗](#)

Dataset Link [↗](#)

[P3] **Rentorium: A Peer-to-Peer Rental and Borrowing Platform** (Apr 2024)

Developed a Django-based web platform enabling users to rent out unused items or borrow items for occasional use, promoting a cost-effective and sustainable sharing economy. Implemented secure user authentication, listing management, and rental transaction tracking. Designed an intuitive UI for seamless user experience and integrated a payment system for hassle-free transactions.

Status: Completed

Github Link [↗](#)

Honors & Awards

- **Reviewer, SCOPE - ICLR 2025 Workshop**
Nominated by the Program Chair of SCOPE - ICLR 2025 as an urgent reviewer. Feb 2025
- **Runner-Up, National Soccer Bot Competition** Mar 2023
Issued by: Robotics Club of BRAC University Dhaka, Bangladesh
- Recognized for robotics and programming excellence, securing runner-up in a national competition.

Certifications

- **Machine Learning Specialization** (Authorized by: DeepLearning.AI, Coursera, Stanford CPD, UVM) Dec 2024
- **Participation in IT Olympiad of "CSE FEST 2024"** (Authorized by: East West University) Apr 2024
- **Python (Basic), Problem Solving (Basic) Certificate** (Authorized by: HackerRank) Dec 2023
- **IELTS Academic:** Overall Band Score: 6.0 (Listening: 6.0, Reading: 6.0, Writing: 6.0, Speaking: 6.5) Jun 2023
- **Introduction to Generative AI** (Authorized by: Google Cloud Skills Boost) May 2024
- **Introduction to Large Language Models** (Authorized by: Google Cloud Skills Boost) May 2024

References

1. **Dr. Swakkhar Shatabda**
Professor, BRAC University
Email: swakkhar.shatabda@bracu.ac.bd
Independent Research Supervisor

3. **Dr. Muhammad Iqbal Hossain**
Associate Professor, BRAC University
Email: iqbal.hossain@bracu.ac.bd
Independent Research Supervisor, Course Instructor

2. **Dr. Md. Golam Rabiul Alam**
Professor, BRAC University
Email: rabiul.alam@bracu.ac.bd
Thesis Supervisor, Course Instructor

4. **M A Motin**
Chief Executive Officer, Homeland Life Insurance Limited
Email: mamotin64@gmail.com
Professional Reference