


Md Tanvir Rouf Shawon

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 <https://shawon-tanvir.github.io/>

ResearchGate: <https://www.researchgate.net/profile/Md-Shawon-6>

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Research Interests

Machine Learning Applications, Natural Language Processing, Computer Vision, Generative Adversarial Network, Semi-Supervised Learning, Explainable Artificial Intelligence, Large Language Models.

Education

George Mason University

Ph.D. in Computer and Information Sciences

Fairfax, Virginia, USA

August 2024 -

Ahsanullah University of Science and Technology

B. Sc. in Computer Science and Engineering

Dhaka, Bangladesh

2016 - 2021

CGPA: 3.934 on a scale of 4.00 (1st in Merit Position)

Notre Dame College, Dhaka

Higher Secondary Certificate

Dhaka, Bangladesh

2013 - 2015

GPA: 5.00 on a scale of 5.00

Undergraduate Thesis

Jamdani Motif Generation using Conditional Generative Adversarial Networks

Supervisor: Mr. Mohammad Imrul Jubair, Assistant Professor, Dept. of CSE. AUST.

Research Grant

(CO-PI) Bengali Fake Review: A Benchmark Dataset and Detection System.

2022

Internal Research Grant supported by Committee for Advance Studies and Research (CASR), AUST

Publications

(* denotes equal contribution)

Published

- G. M. Shahariar Shibli*, **Md. Tanvir Rouf Shawon***, Faisal Muhammad Shah, Mohammad Shafiul Alam & Md. Shahriar Mahbub "**Bengali Fake Reviews: A Benchmark Dataset and Detection System**" in *Neurocomputing, Elsevier, 2024*
- Kazi Elahi, Tasnuva Rahman, Shakil Shahriar, Samir Sarker, **Md. Tanvir Rouf Shawon**, and G. M. Shibli "**A Comparative Analysis of Noise Reduction Methods in Sentiment Analysis on Noisy Bangla Texts**" in *9th Workshop on Noisy and User-generated Text (W-NUT 2024), EACL, 2024*

- **Md. Tanvir Rouf Shawon**, G. M. Shahariar Shibli, Faisal Muhammad Shah, Mohammad Shafiul Alam & Md. Shahriar Mahbub **"Bengali Fake Review Detection using Semi-supervised Generative Adversarial Networks"**. Published in *5th International Conference on Natural Language Processing (ICNLP)*, Guangzhou, China, IEEE, 2023
- G. M. Shahariar Shibli, **Md. Tanvir Rouf Shawon**, Anik Hassan Nibir, Md. Zayed Miandad & Nibir Chandra Mandal **"Automatic back transliteration of Romanized Bengali (Banglish) to Bengali"**. Published in *Iran Journal of Computer Science*, Springer, 2023
- **Md Tanvir Rouf Shawon***, Raihan Tanvir* & Md. Golam Rabiul Alam **"Bengali Handwritten Digit Recognition using CNN with Explainable AI"**. Published in *4th International Conference on Sustainable Technologies for Industry 4.0 (STI)*, Dhaka, Bangladesh, IEEE, 2022
- Raihan Tanvir*, **Md Tanvir Rouf Shawon***, Md Humaion Kabir Mehedi, Md Motahar Mahtab & Annajiat Alim Rasel **"A GAN-BERT Based Approach for Bengali Text Classification with a Few Labeled Examples"**. Published in *Distributed Computing and Artificial Intelligence*, 19th International Conference, L'Aquila, Italy, Springer, 2022
- **MD Tanvir Rouf Shawon***, Raihan Tanvir*, Humaira Ferdous Shifa, Susmoy Kar & Mohammad Imrul Jubair **"Jamdani Motif Generation using Conditional GAN"**. Published in *23rd International Conference on Computer and Information Technology (ICCIT)*, Dhaka, Bangladesh, IEEE, 2020

Under Review

- **Md. Tanvir Rouf Shawon**, G. M. Shahariar, Farzad Ahmed & Sajib Kumar Saha Joy **"Explainable Cost-Sensitive Deep Neural Networks for Brain Tumor Detection from Brain MRI Images considering Data Imbalance"** in *Multimedia Tools and Applications*, Springer, 2023

Conference Presentation

- Bengali Fake Review Detection using Semi-supervised Generative Adversarial Networks, *5th International Conference on Natural Language Processing (ICNLP)*, Guangzhou, China. [Presentation link: <https://youtu.be/rd5N6z5-HOU>] March 24-26, 2023
- Effectiveness of Transformer Models on IoT Security Detection in StackOverflow Discussions, *1st International Conference on Information and Communication Technology for Development*, Khulna, Bangladesh. [Presentation link: <https://youtu.be/Y4ntugjHEGM>] July 29-30, 2022

Teaching Experience

Ahsanullah University of Science and Technology (AUST)

Lecturer

June 2021 - Present

Department of Computer Science & Engineering

Courses: Soft Computing, Pattern Recognition Lab, Algorithms Lab, Object Oriented Programming Lab

Awards & Achievements

- Dean's List of Honor, AUST 2021
- Government Scholarship, Sylhet 2010, 2013
- I-Genius, Grameenphone Prothom Alo Internet Festival 2013

Ongoing Projects

- Neural Machine Translation for Bengali Dialect
- Detection of Online Grooming/Predatory Chats
- Bengali Intent Classification with Generative Adversarial BERT
- Brain Tumor Detection with Cost-Sensitive Neural Network
- Report Generation from Medical Images
- Segmentation of Retinal Blood Vessels using Cutting Edge Segmentation Model
- Medical Image Classification using Federated and Semi-Supervised Learning

Skills

- **Programming Language** *C, C++ , Java, Python, JavaScript, PHP, HTML, CSS*
- **Database** *MS SQL, MySQL, SQLite, Oracle PL SQL*
- **Frameworks** *PyTorch, Keras, TensrfLOW*
- **Graphics API/Plotting Library** *WebGL, Matplotlib*
- **Version Control System** *Git*

Professinal Activities

- Co-opt member (Extra Curricular Activities) - AUST CSE SOCIETY
- Coach, Aust.0Degree & AUST_Samakal: ICPC Asia Dhaka Regional Onsite Contest
- Advisor of Cefalo CodeFiesta 2022: AUST Inter-University Programming Contest
- Organizer of Intra-AUST Programming Contest Spring 2019

Reference

Dr. S. M. A. Al-Mamun

Professor

Ahsanullah University of Science and Technology

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Dr. Md. Shahriar Mahbub

Professor & Head, Department of CSE

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Email: shahriar.cse@aust.edu

Mr. Mohammad Imrul Jubair

Assistant Professor, Department of CSE

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