


Md. Tanvir Rouf Shawon

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

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Research Interests

Computer Vision, Generative Adversarial Network, Semi Supervised Learning, Image Processing, Natural Language Processing, Large Language Models, Explainable Artificial Intelligence, Machine Learning Application, Deep Learning.

Education

Ahsanullah University of Science and Technology

Dhaka, Bangladesh

B. Sc. in Computer Science and Engineering

2016 - 2021

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

Notre Dame College, Dhaka

Dhaka, Bangladesh

Higher Secondary Certificate

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**, 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*
- Nibir Chandra Mandal, G. M. Shahariar* & **Md. Tanvir Rouf Shawon*** "**Effectiveness of Transformer Models on IoT Security Detection in StackOverflow Discussions**". Published in *Studies in Autonomic, Data-driven and Industrial Computing book series (SADIC), 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*
- Tashfiq Nahiyan Khan Khan, Rachita Dewanjee Dewanjee, Nushrat Jahan Shorna Shorna, MD Mejbah Ur Rahman Sowad Sowad & **Md. Tanvir Rouf Shawon Shawon** "**Evaluation of Bengali Handwritten Mathematical Equation using Convolutional Neural Network**" in *International Journal on Document Analysis and Recognition, Springer, 2023*

Ongoing Projects

- 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

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

Ahsanullah University of Science and Technology (AUST)

Part-Time Faculty

February 2021 - June 2021

Department of Computer Science & Engineering

Courses: Assembly Language Programming

Skills

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

Awards & Achievements

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

Professional Activities

- Co-opt member (Extra Curricular Activities) - AUST CSE SOCIETY
- Coach, Aust.0Degree: Asia Dhaka Regional Site Online Preliminary 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

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Prof. Dr. Md. Shahriar Mahbub

Head, Department of CSE
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Mr. Mohammad Imrul Jubair

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