Mahmudul Haque

Address : Dhaka, Bangladesh.

Mobile : +880 172 522 0900

Email : mahmud.eece@gmail.com

ResearchGate : researchgate.net/profile/mahmudul-haque-4

LinkedIn : linkedin.com/in/mahmudeece/

Homepage : mahmudul-ai.github.io

Work Experience:

Adjunct Lecturer *Dhaka, Bangladesh*
Department of Computer Science and Engineering *January 2023-*
Independent University, Bangladesh *Present*

Research Assistant *Dhaka, Bangladesh*
Department of Computer Science and Engineering *December 2022-*
Independent University, Bangladesh *Present*

Academic Background:

B.Sc. in Electrical, Electronic and Communication Engineering (EECE) *Dhaka, Bangladesh*
Military Institute of Science and Technology (MIST) *2017-2022*
CGPA: *3.47/4.00* (last 60 credits: 3.63/4/00)

Higher Secondary Certificate (HSC) *Dhaka, Bangladesh*
Notre Dame College *2017*
GPA: *5.00/5.00* (With Board Scholarship)

List of Publications:

1. **Thesis:**
   a. **M. Haque** and S. Afsha, "**Detection and Classification of Sensitive Audio-Visual Content for Automated Film Censorship and Rating**".

2. **Journal Papers:**
   a. **M. Haque,** H. Nyeem and S. Afsha, **"BrutNet: A Novel Approach for Violence Detection and Classification using DCNN with GRU"**, Soft Computing, 2023. (Submitted)

3. **Conference Papers:**
   a. **M. Haque**, H. Nyeem, T. B. Ovi, A. Nahid, M. S. H. Molla, M. T. M. Tuhin, F. Shahab, A. S. Alam, **"Movie Clip Dataset: A New Dataset for Generalised Real-World Violence Detection"**, 2nd International Conference on Information and Communication Technology for Sustainable Development, 2023. (Submitted)

   b. M. A. Ali, **M. Haque**, S. B. Alam, R. Rahman, M. A. Amin and S. Kobashi, **"Medical Personal Protective Equipment detection using YOLOv7",** 22nd International Conference on Machine Learning and Cybernetics (ICMLC), 2023. (*Accepted*)

   c. **M. Haque**, S. Afsha and H. Nyeem, **"Developing BrutNet: A New Deep CNN Model with GRU for Realtime Violence Detection",** *2022 International Conference on Innovations in Science, Engineering and Technology*, 2022, pp. 390-395, doi: 10.1109/ICISET54810.2022.9775874.

   d. S. Afsha, **M. Haque** and H. Nyeem, **"Machine Learning Models for Content Classification in Film Censorship and Rating",** *2022 International Conference on Innovations in Science, Engineering and Technology*, 2022, pp. 396-401, doi: 10.1109/ICISET54810.2022.9775816.

   e. **M. Haque**, S. Afsha, T. B. Ovi and H. Nyeem, **"Improving Automatic Sign Language Translation with Image Binarisation and Deep Learning",** *2021 5th International Conference on Electrical Engineering and Information Communication Technology (ICEEICT)*, 2021, pp. 1-5, doi: 10.1109/ICEEICT53905.2021.9667804.

   f. M. S. H. Onim, M. I. Akash, **M. Haque** and R. I. Hafiz, **"Traffic Surveillance using Vehicle License Plate Detection and Recognition in Bangladesh",** *2020 11th International Conference on Electrical and Computer Engineering (ICECE)*, 2020, pp. 121-124, doi: 10.1109/ICECE51571.2020.9393109.

Scores:

1. **IELTS:** 7.5 (Listening - 8.5, Reading - 7.5, Writing - 7, Speaking - 7)
2. **GRE:** AWA - 4.0, Quantitative - 161, Verbal - 147

Projects:

- Pelvic bone segmentation and fracture detection using radiographic images at IUB in collaboration with the University of Hyogo, Japan. (*2022-Present*)

- Automatic Sign Language Translation, Violence Detection and Film Censorship and Rating. *(2021-Present)*
- Remote sensing using IoT for a research group at the University of New Hampshire, New Hampshire, United States. *(2022)*
- Demonstration of Frequency Handoff and Call Drop for 2G and 3G networks at MIST. (*2021*)
- Website for the 5th International Conference on Electrical Engineering and Information & Communication Technology (ICEEICT) for MIST. *(2021)*
- A Bulk SMS sending app using Flutter named the Postmaster App. *(2020)*
- Real-time OCR and Text Detection with TensorFlow, OpenCV and Tesseract. *(2020)*

Technical Skills:

Programming Languages (Python, C, C++, MATLAB, Dart, JavaScript), **Image Processing** (OpenCV), **Machine Learning** (TensorFlow, Scikit-learn), **Visualisation** (Matplotlib, Seaborn)**, App Development** (Flutter), **Web Development** (Django, Flask), **Cloud Services** (AWS), **Hardware** (Arduino), **Design & Simulation** (Simulink, Proteus, AutoCAD, Adobe Illustrator, Adobe Photoshop), **Video Editing** (Adobe Premier Pro, DaVinci Resolve), **Platforms** (Windows, Linux), **Version Control (**Git).

Awards & Achievements:

- Received incentive for **scopus-indexed publication** from R&D Wing, MIST.
- Won the Championship in Bangabandhu Inter-Department Cultural Competition 2021 leading my team.
- Achieved 2nd Runner-up position at Hult Prize 2020 (On-campus round, MIST).
- Became 2nd Runners-up in the Line Following Robot Segment in a national **robotics** competition in 2019.
- Awarded a Government **Board Scholarship** for my undergraduate education in 2017.
- Became 2nd Runners-up in a national **Math Olympiad** in 2016.

Courses and Certificates:

- Course on **Neural Networks and Deep Learning**, **CNN,** and **Sequential Models** by *deeplearning.ai* at Coursera.
- Course on **Machine Learning** by *Stanford University* at Coursera.
- Course on **Introduction to AI**, **Python for Data Science, AI & Development, Data Analysis with Python**, and **Data Visualisation with Python** by *IBM* at Coursera.
- Course on **Programming for Everybody** and **Python Data Structures** by *Michigan University* at Coursera

Internships and Training:		Co-curricular Activities:	
Teletalk Bangladesh Ltd Internship (7 days)	*Gulshan, Dhaka, Bangladesh, 2021*	**Department Representative** Department of EECE, MIST	*March 2021- May 2022*
Energypac Electronics Ltd. Factory Internship (7 days)	*Gazipur, Bangladesh 2021*	**General Secretary** IEEE MIST Student Branch	*February 2021- May 2022*
Dhaka Electric Supply Company Limited (DESCO) Internship (7 days)	*Mirpur, Dhaka, Bangladesh 2021*	**Vice President** MIST Innovation Club	*February 2021- May 2022*
		Vice President MIST Literature and Cultural Club	*February 2021- June 2022*

Volunteer Activities:

- Volunteered as a session host at the International Conference on 4th Industrial Revolution and Beyond (IC4IR), 2021.
- Volunteered as a session host at the 5th International Conference on Electrical Engineering and Information Communication Technology (ICEEICT), 2021.
- Conducted a week-long workshop on Python at MIST Innovation Club.

References:

Available on request.