# Eftekhar Hossain

ASSISTANT PROFESSOR,

DEPARTMENT OF ELECTRONICS AND TELECOMMUNICATION ENGINEERING

eftekhar.github.io

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#### Research Interest

Natural Language Processing, Computer Vision, and Deep Learning.

# **Employment**

2022 – · · · · Asst. Professor, Department of Electronics and Telecommunication Engineering (ETE), Chittagong University of Engineering and Technology (CUET), Bangladesh.

2019 – 2022 Lecturer, Department of Electronics and Telecommunication Engineering (ETE),

Chittagong University of Engineering and Technology (CUET), Bangladesh.

2018 – 2019 Lecturer, Department of Electrical & Electronic Engineering,

Premier University, Bangladesh.

### **Education**

2014 – 2018 B.Sc. in Electronics and Telecommunication Engineering

Chittagong University of Engineering and Technology, Bangladesh.

CGPA: 3.88/4.0, Merit Position:  $1^{st}$ 

2021 - 2023 MSc. in Electronics and Telecommunication Engineering

Chittagong University of Engineering and Technology, Bangladesh.

CGPA: 4.0/4.0

Thesis: Investigating Multimodal Features to Identify

Multilingual Offense from Social Media Memes

### Research Publications

- **Eftekhar Hossain**, Omar Sharif and Mohammed Moshiul Hoque. "MUTE: A Multimodal Dataset for Detecting Hateful Memes". *AACL-SRW*. 2022.
- **Eftekhar Hossain**, Omar Sharif, Mohammed Moshiul Hoque. "MemoSen: A Multimodal Dataset for Sentiment Analysis of Memes". *Language Resources and Evaluation Conference* (*LREC*). **2022**.
- 3 Eftekhar Hossain, Mohammed Moshiul Hoque, Enamul Hoque and Md. Saiful Islam. "A Deep Attentive Multimodal Learning Approach for Disaster Identification from Social Media Posts". *IEEE Access* (Q1, IF-3.367). 2022.
- Omar Sharif, **Eftekhar Hossain**, Mohammed Moshiul Hoque. "M-BAD: A Multilabel Dataset for Detecting Aggressive Texts and Their Targets". *CONSTRAINT Workshop (ACL)*. 2022.
- **Eftekhar Hossain**, Omar Sharif, Mohammed Moshiul Hoque. "Identification of Multilingual Offense and Troll from Social Media Memes using Weighted Ensemble of Multimodal Features". *Journal of King Saud University-Computer and Information Sciences*. **Elsevier (Q1, IF-13.473)**, 2022.
- **Eftekhar Hossain**, Omar Sharif and Mohammed Moshiul Hoque. "Investigating Visual and Textual Features to Identify Trolls from Multimodal Social Media Memes". Shared Task Description Paper in Workshop on Speech and Language Technologies for Dravidian Languages (EACL). 2021.

- **Eftekhar Hossain**, Omar Sharif, Mohammed Moshiul Hoque. "Multilingual Code-Mixed Hope Speech Detection using Cross-lingual Representation Learner". Shared Task Description Paper in Workshop On Language Technology For Equality, Diversity, Inclusion (**EACL**). **2021**.
- Omar Sharif, **Eftekhar Hossain** and Mohammed Moshiul Hoque. "Offensive Language Detection from Multilingual Code-Mixed Text using Transformers". Shared Task Description Paper in Workshop on Speech and Language Technologies for Dravidian Languages (EACL). 2021.
- 9 Omar Sharif, **Eftekhar Hossain**, Mohammed Moshiul Hoque. "Combating Hostility: Covid-19 Fake News and Hostile Post Detection in Social Media". *Shared Task Description Paper in CONSTRAINT Workshop (AAAI)*. 2021.
- Omar Sharif, **Eftekhar Hossain** and Mohammed Moshiul Hoque. "TechTexC: Classification of Technical Texts using Convolution and Bidirectional Long Short Term Memory Network". *Proceedings of 17th International Conference on Natural Language Processing (ICON, ACL)*. 2021.
- Eftekhar Hossain, Omar Sharif, Mohammed Moshiul Hoque. "SentiLSTM: A Deep Learning Approach for Sentiment Analysis of Restaurant Reviews". Proceedings of 20th International Conference on Hybrid Intelligent Systems (HIS, Springer). 2020.
- Eftekhar Hossain, Omar Sharif and Mohammed Moshiul Hoque. "Sentiment Polarity Detection on Bengali Book Reviews Using Multinomial Naive Bayes". Proceedings of 5th International Conference on Advanced Computing and Intelligent Engineering (ICACIE, Springer). 2020.
- Omar Sharif, Mohammed Moshiul Hoque, **Eftekhar Hossain**. "Sentiment Analysis of Bengali Texts on Online Restaurant Reviews Using Multinomial Naive Bayes". *Proceedings of International Conference on Advances in Science, Engineering and Robotics Technology (ICASERT, IEEE)*. 2019.

To get full list of publications visit my Google Scholar

### **Technical Skills**

Languages Python, C, Matlab, C++

Machine Learning Scikit-Learn, Tensorflow, Keras, PyTorch

Data Science Pandas, Seaborn, Numpy, Beautiful Soup

Web Development Flask, Bootstrap, PHP, MySQL.

Electronics Proteus, Micro-controller, Mickro C, PicKit.

IDE & Tools Jupyter, Spyder, LTFX, Hugo.

# **Undergraduate Projects**

Final Year Thesis Approached a System that Can Detect Cancer From Bone MR Images Using Neural

Network and Neuro Fuzzy Classifier.

 $\textbf{Skills Used:} \ \textit{MATLAB, Image Processing, Machine Learning}.$ 

Web Dev Project Developed An Online Based Semester Registration System

Skills Used: HTML, CSS, SQL, PHP, Xampp

Electronics Project Designed a Heart Beat Rate Monitoring System

Skills Used: Proteus, MikroC, PicKit

### **Awards and Achievements**

2021 **Winner**, Hope speech detection shared task, EACL-2021.

2nd Runner-up, Multimodal troll meme detection and offensive language classification

shared task, EACL-2021

2016 **Merit Award**, Obtained Highest CGPA in an Academic Year, CUET.

2017 **1**st **Prize**, Project Show competition, CUET

Best Web Development Project Award, CUET.

### Certification

June-2020	Natural Language Processing Nanodegree, Udacity.
April-2020	IBM AI Engineering Professional Certificate, Coursera.
March-2020	TensorFlow: Data and Deployment Specialization, Coursera.
Oct-2019	DeepLearning.AI TensorFlow Developer Specialization, Coursera.
Sep-2019	Deep Learning Specialization, Coursera.

### **Teaching**

2022	Introduction to C Programming Lab (CSE 182) Object Oriented Programming (CSE 284)
2021	Neural and Fuzzy Systmes (ETE 455) Multimedia Communication (ETE 407)
2020	Data Structure and Algorithms (CSE 281) Information Theory and Coding (ETE 311) Antenna and Wave Propagation (ETE 317).
2019	Signal and System (EEE 201) Electrical Circuits-I (EEE 101).
2018	Cellular Mobile Communication (EEE 435).

## **Invited Training**

June-2022 AI and Machine Learning with Python, CUET IT Bussiness Incubator.

Oct-2022 Machine Learning with Python, CUET IT Bussiness Incubator.

### **Test Scores**

GRE **Overall**-306 (Q-163, V-143)

IELTS **Overall**-6.5 (L-7, R-7.5, W-6, S-6)