# 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 - · · · · | <b>Asst. Professor,</b> Department of Electronics and Telecommunication Engineering (ETE), <i>Chittagong University of Engineering and Technology (CUET), Bangladesh.</i> |
|----------------|---|
| 2019 - 2022    | <b>Lecturer,</b> Department of Electronics and Telecommunication Engineering (ETE), <i>Chittagong University of Engineering and Technology (CUET), Bangladesh.</i>        |
| 2018 – 2019    | <b>Lecturer</b> , Department of Electrical & Electronic Engineering, <i>Premier University, Bangladesh.</i>   |

## Education

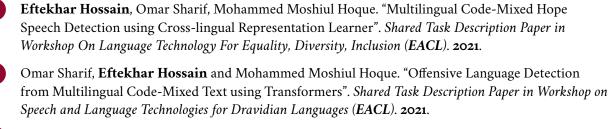
| 2014 – 2018 | <b>B.Sc. in Electronics and Telecommunication Engineering</b><br>Chittagong University of Engineering and Technology, Bangladesh.<br><b>CGPA:</b> 3.88/4.0, <b>Merit Position:</b> 1 <sup>st</sup>  |
|-------------|---|
| 2021 – 2023 | MSc. in Electronics and Telecommunication Engineering<br>Chittagong University of Engineering and Technology, Bangladesh.<br>CGPA: 4.0/4.0<br>Thesis: Investigating Multimodal Features to Identify<br>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.

- Beftekhar 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 (QI, IF-3.367). 2022.
- 4 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.



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.

10 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.

11 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.

13 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**

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| 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, 昭 <sub>臣</sub> X, Hugo.     |

#### **Undergraduate Projects**

| Final Year Thesis   | Approached a System that Can Detect Cancer From Bone MR Images Using Neural<br>Network and Neuro Fuzzy Classifier.<br><b>Skills Used:</b> <i>MATLAB, Image Processing, Machine Learning.</i> |
|---------------------|--|
| Web Dev Project     | Developed An Online Based Semester Registration System<br>Skills Used: <i>HTML, CSS, SQL, PHP, Xampp</i>   |
| Electronics Project | Designed a Heart Beat Rate Monitoring System <b>Skills Used:</b> <i>Proteus, MikroC, PicKit</i>  |

## Awards and Achievements

| 2021 | Winner, Hope speech detection shared task, EACL-2021.   |
|------|---|
|      | <b>2nd Runner-up</b> , 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 <sup>st</sup> 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)<br>Object Oriented Programming (CSE 284)  |
|------|---|
| 2021 | Neural and Fuzzy Systmes (ETE 455)<br>Multimedia Communication (ETE 407)  |
| 2020 | Data Structure and Algorithms (CSE 281)<br>Information Theory and Coding (ETE 311)<br>Antenna and Wave Propagation (ETE 317). |
| 2019 | Signal and System (EEE 201)<br>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.        |

## Misc