

Omar Sharif

LECTURER

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

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🔍 Research Interest

- Deep Learning, Natural Language Processing
 - Undesired (aggressive, abusive, fake, hate) text classification, Sentiment analysis, Emotion recognition
 - Multimodal NLP (abuse detection by analyzing text and image), Question answering, Summarization
 - Multilingual and low-resource NLP

🎓 Education

Chittagong University of Engineering and Technology

Aug 2019-Present

MASTER OF SCIENCE IN COMPUTER SCIENCE

CGPA: 4.00/4.00 Rank: 1st/48

Chittagong University of Engineering and Technology

Mar 2014- Nov 2018

BACHELOR OF SCIENCE IN COMPUTER SCIENCE

CGPA: 3.90/4.00 Rank: 1st/103

💼 Employment

Chittagong University of Engineering and Technology

July 2019 - Present

LECTURER, COMPUTER SCIENCE & ENGINEERING

Chittagong, Bangladesh

Chittagong University of Engineering and Technology

Dec 2018 - June 2019

RESEARCH ASSISTANT, COMPUTER SCIENCE & ENGINEERING

Chittagong, Bangladesh

📖 Publications






To get the full list of publications please check: [G \[Google Scholar\]](#) [® \[ResearchGate\]](#) [🎓 \[Semantic Scholar\]](#)

- **Omar Sharif**, Mohammed Moshikul Hoque, "Tackling Cyber-Aggression: Identification and Fine-Grained Categorization of Aggressive Texts on Social Media using Weighted Ensemble of Transformers", (Submitted to Neurocomputing) [\[PrePrint\]](#)
- Avishek Das, **Omar Sharif**, Mohammed Moshikul Hoque, Iqbal H. Sarker, "Emotion Classification in a Resource Constrained Language Using Transformer-based Approach", (NAACL-SRW 2021 [acceptance rate: 40%]) [\[Paper\]](#)
- Eftekar Hossain, **Omar Sharif**, Mohammed Moshikul Hoque, "Investigating Visual and Textual Features to Identify Trolls from Multimodal Social Media Memes", (DravidianLangTech@EACL-2021) [\[Paper\]](#)
- **Omar Sharif**, Eftekar Hossain, Mohammed Moshikul Hoque, "Offensive Language Detection from Multilingual Code-Mixed Text using Transformers", (DravidianLangTech@EACL-2021) [\[Paper\]](#)
- Eftekar Hossain, **Omar Sharif**, Mohammed Moshikul Hoque, "Multilingual Code-Mixed Hope Speech Detection using Cross-lingual Representation Learner", (LTEDI@EACL-2021) [\[Paper\]](#)
- **Omar Sharif**, Mohammed Moshikul Hoque, "Identification and Classification of Textual Aggression in Social Media: Resource Creation and Evaluation", (CONSTRAINT@AAAI-2021 [acceptance rate: 37.1%]) [\[Paper\]](#)
- **Omar Sharif**, Eftekar Hossain, Mohammed Moshikul Hoque, "Combating Hostility: Covid-19 Fake News and Hostile Post Detection in Social Media", [\[PrePrint@arXiv\]](#)
- **Omar Sharif**, Eftekar Hossain, Mohammed Moshikul Hoque, "TechTexC: Classification of Technical Texts using Convolution and Bidirectional Long Short Term Memory Network", (ICON-2020) [\[Paper\]](#)
- **Omar Sharif**, Mohammed Moshikul Hoque, A. S. M. Kayes, Raza Nowrozy and Iqbal H. Sarker, "Detecting Suspicious Texts using Machine Learning Techniques", (Journal of Applied Sciences [IF: 2.47]) [\[Paper\]](#)

- Eftekhair Hossain, **Omar Sharif**, Mohammed Moshikul Hoque, Iqbal H. Sarker, “SentiLSTM: A Deep Learning Approach for Sentiment Analysis of Restaurant Reviews”, (HIS-2020) [\[Paper\]](#)
- M A Muhaimin Sakib, **Omar Sharif**, Mohammed Moshikul Hoque, “Offline Bengali Handwritten Sentence Recognition using BiLSTM and CTC Networks”, (ICIoTCT-2020) [\[Paper\]](#)
- **Omar Sharif**, Mohammed Moshikul Hoque, “Automatic Detection of Suspicious Bangla Text Using Logistic Regression”, (ICO-2019) [\[Paper\]](#)
- **Omar Sharif**, Mohammed Moshikul Hoque, Eftekhair Hossain, “Sentiment Analysis of Bengali Texts on Online Restaurant Reviews Using Multinomial Naïve Bayes”, (ICASERT-2019) [\[Paper\]](#)

Teaching

I conducted theory courses and lab sessions as a co-instructor. Created and graded weekly assignments, class tests and final exams.

- Object oriented programming (C++) 
- Object oriented programming (sessional) 
- Structured programming (C) 
- Structured programming (sessional) 
- Internet programming (sessional) 

Technical Skills

Proficient	C, C++, Python, Matlab, Octave
Moderate	PyTorch, Java, JavaScript, MySQL, Verilog HDL
Libraries	TensorFlow, Keras, NLTK, Scikit-learn, Gensim, Pandas
Frameworks & Tools	Flask, Django, Jupyter, BeautifulSoup, Git, Latex

Competitive Programming

Solved 1000+ competitive programming problems in different online platforms as part of my preparation for programming contests (ICPC, NCP, etc). [🔗 Solved problems \(GitHub\)](#)

Codeforces	Solved 500+ problems (omar_sharif)
UVA	Solved 200+ problems (cueto_fighter)
LightOJ	Solved 120+ problems (omar-sharif)
CS Academy	Solved 50 problems (omar_sharif)

Leadership

CUET NLP Lab

Aug 2019 - Present

MENTOR

- Meet weekly with the undergrads working under CUET NLP lab. Discuss research problems, share ideas and track their progress
- Teach students the basics of deep learning and NLP

Competitive Programming Club, CUET

Jan 2019 - Present

COACH

- Teach students advance data structures, number theory and algorithms
- Organize contests, keep track of individual performance and form up teams

ACM Student Chapter, CUET

Mar 2021 - Present

VICE CHAIR

- Lead a team of 30+ active members. Plan and asses the growth of the chapter
- Arrange research seminars, talks and workshops on different trending topics

Honors and Awards

- **ICT division Bangladesh research grant** (2020-2021): 1000K BDT
- **CUET IT business incubator research grant** (2019-2020): 400K BDT
- **CUET Ex-students merit award** (2015, 2016, 2017): For obtaining highest GPA in an academic year
- **Honorable mention** (2017, 2018): ACM ICPC Dhaka Regional
- **Best paper award**: CONSTRAINT collocated with AAAI-2021
- **Winner**: Hope speech detection shared task, EACL-2021
- **2nd runner-up**: Multimodal meme detection and offensive language classification shared task, EACL-2021
- **27th position** (among 1600+ teams): ACM ICPC Dhaka Regional Preliminary, 2017
- **31st position** (among 150 selected teams): National Collegiate Programming Contest, 2017
- **5th position** (among 70+ teams): Divisional Programming Contest, 2017
- **1st position** (among 50 teams): Inter University Programming Contest, 2016
- **Best internship trainee award** (2017): For doing best team project

Certifications

Deep Learning Specialization

Coursera

 **DEEP LEARNING**  **DL NOTES**

February 2019

- Get the foundations of deep learning and learn about CNN, RNNs, LSTM, Adam, Dropout, BatchNorm, Xavier/He initialization and other hyperparameter optimization techniques which help me to build successful deep learning projects.
- Implement different case studies on autonomous driving, sign language reading, music generation, and natural language processing using tensorflow and python.

DeepLearning.AI TensorFlow Developer Specialization

Coursera

 **TENSORFLOW**

December 2019

- Built basic neural network, GRUs, LSTMs using tensorflow and get profound implementation knowledge of tensorflow.
- Learned how to improve network performance using convolutions, how to teach machines to understand, analyze, and respond to human speech with natural language processing systems.

Natural Language Processing Specialization

Coursera

 **NATURAL LANGUAGE PROCESSING** (ENROLLED)

- Will learn about recurrent neural networks, LSTMs, GRUs & Siamese network in TensorFlow & Trax for sentiment analysis, text generation & named entity recognition.
- Will apply encoder-decoder & self-attention to machine translate complete sentences, summarize text, build chatbots & question-answering.

Co-curricular Activities

- Organized CUET CSE Fest 2017, 2018, 2019.
- Organized CUET National Collegiate Programming Contest 2017.
- Champion of CUET Teachers Association Football Tournament 2019.
- Champion of CUET Football League 2018, 2019.
- Champion of Intra Hall Badminton Tournament 2017.
- Runner-up of Intra Hall Badminton Tournament 2016.
- Runner-up of Inter University Volleyball Tournament 2017.