Omar Sharif

LECTURER

DEPARTMENT OF COMPUTER SCIENCE ENGINEERING

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Research Interest _____

- · Natural Language Processing
 - Suspicious, abusive, offensive and aggressive language detection and classification
 - Sentiment analysis, Emotion recognition, Question answering, Summarization
 - Image/video captioning (Multi-modal NLP)

Education

Chittagong University of Engineering and Technology

MASTER OF SCIENCE IN COMPUTER SCIENCE

R OF SCIENCE IN COMPUTER SCIENCE

Chittagong University of Engineering and Technology

BACHELOR OF SCIENCE IN COMPUTER SCIENCE,

March 2014- Nov 2018 CGPA: 3.90/4.0

2019-Present

Employment ___

Chittagong University of Engineering and Technology

LECTURER, COMPUTER SCIENCE & ENGINEERING

July 2019 - Present Chittagong, Bangladesh

Chittagong University of Engineering and Technology

RESEARCH ASSISTANT, COMPUTER SCIENCE & ENGINEERING

Dec 2018 - July 2019
Chittagona Banaladesh

Rankmylist Inc.

SOFTWARE ENGINEER INTERN

Chittagong, Bangladesh

- · Completed a team project which determines the strength of a password based on some given criteria
- Performed website testing in beta stage

Nov 2017 - Nov 2017 Chittagong, Bangladesh

Publications

- 1. Omar Sharif, Eftekhar Hossain, Mohammed Moshiul Hoque "Combating Hostility: Covid-19 Fake News and Hostile Post Detection in Social Media", CONSTRAINT@AAAI-2021. [Paper]
- 2. Omar Sharif, Mohammed Moshiul Hoque "Identification and Classification of Textual Aggression in Social Media: Resource Creation and Evaluation", CONSTRAINT@AAAI-2021.
- 3. Omar Sharif, Eftekhar Hossain, Mohammed Moshiul Hoque "TechTexC: Classification of Technical Texts using Convolution and Bidirectional Long Short Term Memory Network", In Proceedings of 17th International Conference on Natural Language Processing (ICON), IIT Patna, India, 18-21 December 2020. [Paper]
- 4. Omar Sharif, Mohammed Moshiul Hoque, A. S. M. Kayes, Raza Nowrozy and Iqbal H. Sarker, "**Detecting Suspicious Texts using Machine Learning Techniques**", Journal of Applied Sciences, 10(18), 6527 (2020). [Paper]
- M A Muhaimin Sakib, Omar Sharif, Mohammed Moshiul Hoque, "Offline Bengali Handwritten Sentence Recognition using BiLSTM and CTC Networks", In Proceedings of 5th International Conference on Internet of Things and Connected Technologies, IIT Patna, India, 03-05 July 2020. [Paper]

- 6. Eftekhar Hossain, Omar Sharif, Mohammed Moshiul Hoque, Iqbal H. Sarker "SentiLSTM: A Deep Learning Approach for Sentiment Analysis of Restaurant Reviews", In Proceeding of 20th International Conference on Hybrid Intelligent Systems (HIS 2020), 14-16 December 2020. [Paper]
- 7. Eftekhar Hossain, Omar Sharif, Mohammed Moshiul Hoque, "Sentiment Polarity Detection on Bengali Book Reviews Using Multinomial Naive Bayes", In Proceeding of 5th International Conference on Advanced Computing and Intelligent Engineering, Mauritius, 25-27 June 2020. [Paper]
- 8. Omar Sharif, Mohammed Moshiul Hoque, "Automatic Detection of Suspicious Bangla Text Using Logistic Regression", In Proceedings of International Conference on Intelligent Computing & Optimization, pp. 581-590, Koh Samui, Thailand, 3–4 October 2019. [Paper]
- 9. Omar Sharif, Mohammed Moshiul Hoque, Eftekhar Hossain, "Sentiment Analysis of Bengali Texts on Online Restaurant Reviews Using Multinomial Naïve Bayes", In Proceedings of International Conference on Advances in Science, Engineering and Robotics Technology, Dhaka, Bangladesh, 3–5 May 2019. [Paper]

Google Scholar: [Please click here to go to my Google scholar page]

Technical Skills

Proficient C, C++, Python, Matlab, Octave **Moderate** Java, JavaScript, PHP, MySQL

Libraries TensorFlow, Keras, NLTK, Scikit-learn, Gensim, Pandas

Frameworks & Tools Flask, Django, Jupyter, Git, Latex

Competitive Programming _____

Competitive Programming Trainer

Jan 2019 - Present

CHITTAGONG UNIVERSITY OF ENGINEERING AND TECHNOLOGY

• Teach students advance data structures and algorithms

Solved 1000+ competitive programming problems in different online platforms as part of my preparation for proramming contests (ICPC, NCPC, etc). Solved problems (GitHub)

Codeforces Solved 500+ problems (omar_sharif)

UVA Solved 200+ problems (cuet_fighter)

LightOJ Solved 120+ problems (28907)

CS Academy Solved 50 problems (omar_sharif)

Achievements _____

- 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
- 27th position (among 1600+ teams): ACM ICPC Dhaka Regional Preliminary, 2017
- $31^{
 m st}$ **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
- Technical scholarship (2014-2018): To get position among top 50% students in the class
- Primary & high school scholarship (2005, 2008): Government of Bangladesh

Certifications

Deep Learning Specialization

Courserd

DEEP LEARNING

February 2019

- Get the foundations of deep learning and learn about CNN, RNNs, LSTM, Adam, Dropout, BatchNorm, Xavier/He initialization and other hyper-parameter 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

July 2020

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.

Projects

Suspicious Bangla Text Detection Using Machine Learning

FINAL YEAR THESIS PROJECT

- Goal of this project is to develop a classifier model which can Bengali text into suspicious and non-suspicious category. It is the very first work
 for detecting suspicious Bengali text. SVM, LR, DT, KNN, NB these ML algorithms have been utilized to build the model
- · Tools: Python, Scikit-learn, Pandas, Tensorflow

CSE1to4

4TH YEAR SOFTWARE ENGINEERING TEAM PROJECT

- A website is developed that provides study and final year project materials to the students. Users can upload, download, search for relevant
 contents as well as discuss and request for contents
- Tools: HTML5, CSS, SQL, PHP, JavaScript, Jquery

Hall management system

3RD YEAR DATABASE TEAM PROJECT

- A website that is developed to help the students and hall administration. Students can pay bills and apply for room allotment and administrator
 can validate them
- Tools: HTML, W3CSS, SQL, PHP

Co-curricular Activities

- Mentor CUET competitive programming club
- Organized CUET CSE Fest 2017,2018,2019.
- Organized CUET National Collegiate Programming Contest 2017.
- Champion of CUET Football League 2018, 2019.
- Champion of Intra Hall Badminton Tournament 2017.
- Runner-up of Inter University Volleyball Tournament 2017.