A.N.M. FAHIM FAISAL

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SUMMARY

Currently Working as a Research Assistant at the Department of Computer Science and Engineering of North South University. Co-founded an AI enabled Travel-tech startup, Paango. A highly motivated learner and an aspirant Software Engineer. Interested in research and analytical works, specially in Deep Learning and AI field. An avid reader of scholarly articles. Looking forward to broaden my horizons in the field of IT.

EDUCATION

Bachelor of Science

North South University, CGPA: 2.78 (82%)

Key Courses:

- Machine Learning
- Artificial Intelligence
- Software Engineering
- Pattern Recognition and Neural Network

Higher Secondary Certificate Cantonment College Jessore, GPA: 5.00

Secondary School Certificate

Dawood Public School, GPA: 5.00

SKILLS

OS:	Windows, Linux
DevOps:	Git, Slack
Programming:	Python, C, C++, Java, Latex
Front-end:	HTML5, CSS3, Bootstrap, ReactJs
Back-end:	NodeJs, MySQL, MongoDB
Platforms:	MS Office, Adobe
Frameworks:	Keras, PyTorch, Tensorflow, Pandas, Matplotlib, OpenCV, Scikit learn

PUBLICATIONS

1. A.N.M.F. Faisal, Afikur Rahman, Mohammad Tanvir Mahmud Habib, Abdul Hasib Siddique, Mehedi Hasan, Mohammad Monirujjaman Khan, Neural networks based multivariate time series forecasting of solar radiation using meteorological data of different cities of Bangladesh, Results in Engineering, Volume 13, 2022, 100365, ISSN 2590-1230, https://doi.org/10.1016/j.rineng.2022.100365.

2. A. N. M. Fahim Faisal, M. A. Rahman and T. Farah, "A Rule-Based Bengali Grammar Checker," 2021 Fifth World Conference on Smart Trends in Systems Security and Sustainability (WorldS4), 2021, pp. 113-117, doi: 10.1109/WorldS451998.2021.9514031.

2017 - 2021

2016

2014

- Data Structures and Algorithms
- Design and Analysis of Algorithms
- Concepts of Programming Languages
- Computer Organization and Architecture

CSE499 - UNDERGRADUATE DISSERTATION

In this research, Transfer Learning and Domain Adaptation was explored for speaker diarization on Bangla audio data, which is first in this context. The approach experiments with different clustering algorithms and embedding techniques to reduce Diarization Error Rate (DER) for noisy audio.

A RULE BASED BENGALI GRAMMAR CHECKER

CSE299 - JUNIOR PROJECT DESIGN

Written a few grammar rules in Regular Expression(regex) considering the fundamental dependencies of different parts of speech on each other. Modified and used a pre-trained parts of speech (POS) tagger.

MULTIVARIATE TIME SERIES FORECASTING OF SOLAR RADIATION August 2021 CSE498R - CO-OP RESEARCH PROJECT

Categorized and cleaned ten years of solar radiation data for five cities of Bangladesh containing fourteen reading per day. Trained these multivariate data on RNN, LSTM and GRU to forecast solar radiation.

SENTIMENT ANALYSIS ON MULTILINGUAL MOVIE REVIEW DATASET **April 2020** CSE465 - PATTERN RECOGNITION AND NEURAL NETWORK

In this research, 1D and 2D CNN, LSTM and CNN-BiLSTM model was used to train IMDB movie review data and Bangla drama data to make a comparative analysis for deeper understanding of data or model related change.

EXPERIENCE

RESEARCH ASSISTANT

Department of Electrical and Computer Science North South University, Dhaka, Bangladesh

Supervisor: Dr. Mohammad Monirujjaman Khan

Project: Finding and implementing low resource unsupervised approach for different sub-tasks based on clinical Electroencephalography (EEG) data.

SUB-EXECUTIVE

NSU ACM Student Chapter

- Lead Team Publication and Co-ordinate between other teams.
- Prepare write-ups for in-house events.
- Organize and supervise different events.

RESEARCH INTEREST

REFERENCES

Assistant Professor Department of ECE

- Natural Language Processing
- Human Computer Interaction

Dr. Mohammad Monirujjaman Khan

Contact Number: +8801779006296

North South University, Dhaka, Bangladesh

Email: monirujjaman.khan@northsouth.edu

- Machine Learning
- Deep Learning

Ms. Tanjila Farah Senior Lecturer Department of ECE North South University, Dhaka, Bangladesh Email: tanjila.farah@northsouth.edu Contact Number: +880-2-55668200 Ext. 1526

PROJECTS

TRANSFER LEARNING FOR SPEAKER DIARIZATION

April 2022 - Present

January 2017 - December 2019

August 2020 - December 2020

January 2021 - August 2021