Umnoon Binta Ali

Kapatakkho D702, Sector 18, Uttara, Dhaka-1230

Github | LinkedIn | umnoon.ali@northsouth.edu | +8801627097553

SUMMARY

Innovative and scientifically rigorous recent graduate majoring in Computer Science and Engineering from North South University. I am a data science enthusiast. I am attentive to new technologies, take on leadership, and make analytical decisions.

WORK EXPERIENCE

Research Assistance   April 2022 - July 2022

Department of Electrical and Computer Engineering
North South University
Supervisor: Dr. Nabeel Mohammed
Research Domain: Bangla NLP

PROJECTS

Transfer Learning for Speaker Diarization on Bangla Audio Dataset
CSE499 Graduate Dissertation

In this research, transfer learning was explored for speaker diarization on our own Bangla audio data. the approach sxperiments with different clustering algorithms and embedding techniques to reduce Diarization Error Rate, DER for noisy data.

Contrastive Learning for Text-to-Image on Paraphrasing Captions
CSE498 CO-OP Research Project

In this research, I presented a contrastive learning strategy to for enhancing the quality and semantic consistency of synthetic images by paraphrasing the captions from the CUB dataset.

A Deep Convolutional Neural Network for Bangla Handwritten Numeral Recognition
CSE465 Pattern Recognition and Neural Network

In this research, I studied the most unbiased and augmented Dataset NumtaDB to classify images in isolated Bangla numerals. I preprocessed the data, created synthetic data augmentation using keras library and feed the data to the training model in the pipeline stage. Furthermore, I used popular CNN network ResNet34 to better the performance of the model.

Outbreak Prediction and Visualization: Covid-19
CSE299 Junior Design Project

Researchers and social and behavior change communication specialists at Johns Hopkins University wrote insights and analyses on how to use the data in partnership with WHO's Global Outbreak Alert and Response Network (GOARN). I used this data to predict the time of the highest spread of covid-19. The time-series visualization is done with PowerBI.

Skills

Programming	Python, C, C++, Java, PHP, Latex
Frameworks	Keras, PyTorch, Tensorflow, Pandas, Matplotlib, OpenCV, Scikit Learn
Front-end	HTML5, CSS3, Bootstrap, ReactJs
Back-end	NodeJs, MySQL
Visualization Tool	PowerBI
OS	Windows, Linux
DevOps	Git
Platforms	MS Office, Adobe

Education

2017 - 2021	Bachelor of Science at **North South University**	(CGPA: 3.6/4.0)
2015 - 2016	Higher School Certificate at **Rajuk Uttara Model College**	(GPA: 5.0/5.0)
2013 - 2014	Secondary School Certificate at **Rajuk Uttara Model College**	(GPA: 5.0/5.0)

Extra-curricular Activities

2018	Arduino Workshop at NSU ACM Student Chapter
	Made obstacle avoiding robot
2017-2019	Computer and Engineering Club at North South University
	Junior member
2012-2014	Debating Club at Rajuk Uttara Model College
	Participated in the in-house Parliamentary Debating Competition
2014-2015	Played Handball at Rajuk Uttara Model College
	Regional Champion of Intra-School Handball Tournament
Music	I sing, play ukulele and have my own YouTube Channel
Art	Acrylic Paintings, Abstract Art, Digital Art

Attributes

Design Skills	AutoCAD, Sketch up
Soft Skills	Leadership, Team work, Adaptability, Digital Literacy
Language Proficiency	English, Bangla

Reference

Dr. Nabeel Mohammed
Assistant Professor
Department of Electrical and Computer Engineering
North South University
Email: nabeel.mohammed@northsouth.edu

Ms. Tanjila Farah
Senior Lecturer
Department of Electrical and Computer Engineering
North South University
Email: tanjila.farah@northsouth.edu