Oishee Bintey Hoque

Software Engineer, Enosis Solutions

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OBJECTIVES

I am a passionate programmer and AI enthusiast. I am currently working as a Software Engineer. I have broad interest across AI, Machine Learning and it's applications, Computer Vision. I have mainly worked with deep learning algorithms and it applications in the field of Computer Vision. I bring with me, my strong passion for technology and quick learning capability.

EDUCATION

Ahsanullah University Of Science and Technology   Dhaka, Bangladesh
B.SC. in Computer Science and Engineering   *May 2015 – July 2019*
CGPA: 3.79/4.00 (5th Position, Total: 152 Students)

WORK EXPERIENCE

Software Engineer   Aug. 2020 – Present
Enosis Solutions   *Dhaka, Bangladesh*
- Developing a a full-stack web application using React, Node and PostgreSQL to manage Bitcoin transactions.
- Developed a full-stack web application - a machine learning platform to label, train,store data, export others projects etc - using React,Node, Express and MongoDB

RESEARCH INTERESTS

AI, Machine Learning, Deep Learning & its applications, Computer Vision, Data Science

UNDERGRADUATE RESEARCH

Real-time Bangladeshi Sign Language Detection Using Faster R-CNN

This is a real-time system which detects sign from a video and classifies the sign in the video. It is device and background independent. For the purpose of our work, we developed a robust dataset from scratch - BdSLImSet - which is available for further research. Our system is trained on Faster R-CNN and detects the sign with great accuracy.

Bangladeshi Sign Word Recognition using LSTM

This is a system which detects sign words -sequence of actions- from a video. This works with sequential data and falls under the domain of action recognition. For the purpose of our work, we developed a robust dataset from scratch - BdSLVidSet - which is available for further research. This dataset is trained using CNN for feature extraction and LSTM to combine the sequential feature to recognize the words.

PUBLICATIONS

- **Oishee Bintey Hoque**, Md. Imrul Jubair, Al-Farabi Akash, Md. Saiful Islam, **"BdSL36: A Dataset for Bangladeshi Sign Letters Recognition",** MLCSA Workshop, Proceedings of the Asian Conference on Computer Vision (ACCV), 2020

- **Oishee Bintey Hoque**, Maisha Binte Rashid, K.M. Tawsik Zawad,**"Autonomous Deblurring Images and Information Extraction from Documents Using CycleGAN and Mask RCNN",** Accepted in 23rd International Conference on Computer and Information Technology, Dhaka, Bangladesh (ICCIT 2020)

- Sifat Ahmed, Tonmoy Hossain, **Oishee Bintey Hoque**, Sujan Sarker, Sejuti Rahman, Faisal Muhammad Shah, **"Automated COVID-19 Detection from Chest X-Ray Images : A High Resolution Network (HRNet) Approach"**, Pre-print version published at Research Square.

- **Oishee Bintey Hoque**, Md. Imrul Jubair, Md. Saiful Islam, Al-Farabi Akash, **"Real Time Bangladeshi Sign Language Detection using Faster R-CNN",** International Conference on Innovation in Engineering and Technology(ICIET), Dhaka, Bangladesh, 2018, doi: 10.1109/CIET.2018.8660780.

STANDARDIZED TEST SCORES

- Test of English as a Foreign Language (**TOEFL**)
  Reading – 25 , Listening – 23, Speaking – 27, Writing – 23 (Total – 98)

TECHNICAL SKILLS

Languages: Java, Python, C/C++, JavaScript, HTML/CSS, R, Matlab, WebGL
Database: SQL (MySQL,Oracle,Postgres), MongoDB
Frameworks: React, Node.js, Material-UI
Developer Tools: Git, VS Code, Visual Studio, PyCharm, Netbeans, Codeblocks
Libraries: Pandas, NumPy, Matplotlib, Tensorflow, Pytorch, FastAi

ACADEMIC PROJECTS

- War of Spaceship
- Sup - Desktop based server-client chat application with file sharing option
- Shop Expert - E-commerce based website
- Robo Mos Face Recognizing Messenger
- Super-shop Management System
- Puzzle Game with A* Algorithm
- Personality-Analysis-Using-Various-Feature-Scaling-On-Dataset
- Efficient Noise Reduction System With Dataset

PERSONAL PROJECTS

- 37 Dogs Breed Classifier
- Face Recognition System Using Facenet (1:k matching problem)
- Sentiment Analysis from Facial Expression
- Neural Style Transfer
- Hand Segmentation (wearing gloves)
- Human Segmentation and Background Remove
- IMDB User Review Analysis

AWARDS & ACHIEVEMENTS

- "Dean's List of Honor" in undergrad based on result
- 11th Position, National Girls Programming Contest-2016
- 16th Position, National Girls Programming Contest-2017
- 64th Position, ACM ICPC DHAKA Regional 2017
- 99th Position, ACM ICPC DHAKA Regional 2018
- 5th Position, Intra AUST Programming Contest CONTEST-Spring 2016

- Judge at Bangladeshi National Robotics Olympiad, 2019
- Judge at Bangladeshi National Robotics Olympiad, 2020
- Certificate on Presentation at International Conference on Innovation in Engineering and Technology(ICIET - 2018)
- Certificate on Presentation at 23rd International Conference on Computer and Information Technology, Dhaka, Bangladesh (ICCIT 2020)
- Certificate on Presentation at 15th Asian Conference on Computer Vision (ACCV), 2020
- Certificate on passing Japanese NAT - N4 Test
- Member of Core Organizing Panel, "AUST CSE WEEK - 2018"

Online Courses

- Deep Learning for Coders – Fastai
- Deep Learning Specialization by Andrew Ng – Coursera
- TensorFlow in Practice Specialization – Coursera
- TensorFlow: Data and Deployment Specialization - Coursera

References

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