MD ABU QUWSAR OHI

@ quwsarohi@gmail.com   in quwsarohi   ● Dhaka, BD

○ QuwsarOhi   ♂ AQ Ohi   QuwsarOhi

⌂ https://quwsarohi.github.io

RESEARCH INTERESTS

Artificial Intelligence | Deep Learning | Computer Vision | Pattern Recognition | Reinforcement Learning

PROGRAMMING SKILLS & TOOLS

Python | C++ | Latex | Tensorflow | Pytorch | Sklearn | Matplotlib | NumPy | Git | Linux | Docker | Django | Bootstrap

ACADEMIC EXPERIENCE

Lecturer
Bangladesh University of Business & Technology

📅 April 15, 2021 – Ongoing   ● Mirpur, Dhaka, Bangladesh

RESEARCH EXPERIENCE

Research Assistant
Bangladesh University of Business & Technology

📅 August 1, 2020 – Ongoing   ● Mirpur, Dhaka, Bangladesh

- Researching new architectural and mathematical strategies to reduce the current limit of deep learning based approaches.
- Developing and improving handwriting recognition systems to classify writers based on their handwriting.
- Researching and developing real-world speaker recognition systems.

Researcher
Advanced Machine Learning Lab

📅 August, 2020 – Ongoing   ● Mirpur, Dhaka, Bangladesh

- Assisting fellow researchers for research and writing papers.
- Collaborating with labs and team-based research tasks.

PUBLICATIONS

📄 Journals (7 Total)

- "Exploring optimal control of epidemic spread using reinforcement learning"
  Ohi, Abu Quwsar, M. F. Mridha, Muhammad Mostafa Monowar, and Md. Abdul Hamid
  Scientific Reports 10.1. Nature Publishing Group, 2020
  DOI: 10.1038/s41598-020-79147-8

- "AutoEmbedder: A semi-supervised DNN embedding system for clustering"
  Ohi, Abu Quwsar, MF Mridha, Farisa Benta Safir, Md Abdul Hamid, and Muhammad Mostafa Monowar
  Knowledge-Based Systems p. 106190. Elsevier, 2020
  DOI: 10.1016/j.knosys.2020.106190, URL: https://arxiv.org/abs/2007.05830

- "FabricNet: A Fiber Recognition Architecture Using Ensemble ConvNets"
  Ohi, A. Q., M. F. Mridha, M. A. Hamid, M. M. Monowar, and F. A. Kateb
  IEEE Access 9 pp. 13224–13236. 2021
  DOI: 10.1109/ACCESS.2021.3051980

- "A Survey of Speaker Recognition: Fundamental Theories, Recognition Methods and Opportunities"
  Kabir, Muhammad Mohsin, MF Mridha, Jungpil Shin, Israt Jahan, and Abu Quwsar Ohi
  IEEE Access. IEEE, 2021
  DOI: 10.1109/ACCESS.2021.3084299

- "BanglaWriting: A multi-purpose offline Bangla handwriting dataset"
  Mridha, MF, Abu Quwsar Ohi, M Ameer Ali, Mazedul Islam Emon, and Muhammad Mohsin Kabir
  Data in Brief p. 106633. Elsevier, 2020
  DOI: 10.1016/j.dib.2020.106633

- "A Lightweight Speaker Recognition System Using Timbre Properties"
  Ohi, Abu Quwsar, MF Mridha, Md Abdul Hamid, Muhammad Mostafa Monowar, Dongsu Lee, and Jinsul Kim
  The Journal of Contents Computing 2.1 pp. 139–151. 2020
  DOI: 10.9728/jcc.2020.06.2.1.139, URL: https://arxiv.org/abs/2010.05502

- "Full Dynamic Transmission Model and Threat Analysis of COVID-19"
  Ohi, Abu Quwsar, MF Mridha, Md Abdul Hamid, Muhammad Mostafa Monowar, Md Ferdous Mridha, and AKM Ashiquzzaman
  The Journal of Contents Computing 2.1 pp. 127–138. 2020
  DOI: 10.9728/jcc.2020.06.2.1.127

👥 Conference Proceedings (3 Total)

- "Human Abnormality Detection Based on Bengali Text"
  Mridha, MF, Md Saifur Rahman, and Abu Quwsar Ohi
  IEEE Region 10 Symposium (TENSYMP) pp. 1102–1105. 2020
  DOI: 10.1109/TENSYMP50017.2020.9230629, URL: https://arxiv.org/abs/2007.10718

- "An Evolution of CNN Object Classifiers on Low-Resolution Images"
  Kabir, Md Mohsin, Abu Quwsar Ohi, Md Saifur Rahman, and MF Mridha
  IEEE 17th International Conference on Smart Communities: Improving Quality of Life Using ICT, IoT and AI (HONET)
  pp. 209–213. 2020
  DOI: 10.1109/HONET50430.2020.9322661

- "End-to-End Optical Character Recognition for Bengali Handwritten Words"
  Safir, Farisa Benta, Abu Quwsar Ohi, Muhammad F Mridha, Muhammad Mostafa Monowar, and Md Abdul Hamid
  2021 National Computing Colleges Conference (NCCC) pp. 1–7. 2021
  DOI: 10.1109/NCCC49330.2021.9428809

📖 Book Chapters (1 Total)

- *A Multi-Plant Disease Diagnosis Method Using Convolutional Neural Network*
  Kabir, Muhammad Mohsin, Abu Quwsar Ohi, and M. F. Mridha
  Computer Vision and Machine Learning in Agriculture pp. 99–111. Springer Singapore, 2021
  DOI: 10.1007/978-981-33-6424-0_7, URL: https://arxiv.org/abs/2011.05151

✍️ Under Review (1 Total)

- *U-vectors: Generating clusterable speaker embedding from unlabeled data*
  Mridha, MF, Abu Quwsar Ohi, M Ameer Ali, Muhammad Mostafa Monowar, Md Hamid, et al.
  arXiv preprint arXiv:2102.03868. 2021
  URL: https://arxiv.org/abs/2102.03868

ACHIEVEMENTS

🏆 **Programming Contest Winner**
Total 5 times champion in BUBT Intra University Programming Contest

🏆 **National Collegiate Programming Contest (NCPC)**
Placed among top 31

🏆 **International Collegiate Programming Contest - Dhaka Regional Contest**
Attended ICPC Dhaka Regional 2 times and placed among top 70

🏆 **Inter University Programming Contest**
Attended more than 5 contests and conquered highest rank 7

📈 **Problem Solver**
Solved around 2000 problems in various online judges

ONLINE PROGRAMMING PROFILES

- Solved 470+ problems in UVA online judge.
- Solved 220+ problems in LightOJ.
- CodeForces highest rating 1581.
- CodeChef highest rating 1948.

EDUCATION

B. Sc in Computer Science and Engineering
Bangladesh University of Business & Technology

📅 June 2016 – June 2020   📍 Mirpur, Dhaka, Bangladesh

- CGPA - 3.71 (out of 4)

Higher Secondary School Certificate
Savar Cantonment Public School & College

📅 2013 – 2015   📍 Savar, Dhaka, Bangladesh

- GPA - 4.83 (out of 5)

INDUSTRY EXPERIENCE

Software Engineer (Intern)
KloverCloud

📅 From November, 2020 – January, 2021

- Designing and developing web applications.
- Deploying and testing application in Kubernetes.

VOLUNTEER EXPERIENCE

Problem Setter & Judge
Bangladesh University of Business and Technology

📅 From 2019 – Present

- Planning & managing intra-university programming contests.
- Writing & collecting problem-sets and conducting critical problem-set selection tasks.

Conveiner
Competitive Programming Community (BUBT)

📅 From 2019 – Present

- Planning semester-wise schedule for training classes.
- Training & guiding junior competitive programmers.

REFEREES

Prof. Muhammad Firoz Mridha

@ Bangladesh University of Business and Technology

✉ firoz@bubt.edu.bd

Prof. Md. Abdul Hamid

@ King Abdulaziz University

✉ mabdulhamid1@kau.edu.sa