





# MD ISTIAQ ANSARI

Problem Solving Enthusiast & Proud Geek

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 Dhaka, Bangladesh

 istiaq28

## EXPERIENCE

### Machine Learning Engineer

REVE Systems Ltd.

 Aug 2021 – Ongoing  Dhaka, Bangladesh

- Leading the algorithm and dataset development for **Spell Grammar Error Detection and Correction for Bangla** project

### Research Assistant

mHealthLab, BME, BUET

 June 2019 – Aug 2021  Dhaka, Bangladesh

- Development of a Novel Learnable-Spectrogram System for End-to-End Audio Signal Classification Ansari and Hasan, 2022.
- Heart Sound Abnormality Detection Using tConv Filterbank for Domain Invariant Classification.
- Analysis of Heart Sound Signal's Additive and Convolutional Distortion using Fused Cepstral Features.
- ECG Arrhythmia Detection Using Residual One-Dimensional CNN

### Undergraduate Projects

Bangladesh University of Engineer and Technology

 Feb 2015 – Aug 2019  Dhaka, Bangladesh

- Robust Human Authentication using Dynamic ROI Extraction from Dorsal Palm vein Images via One Shot Siamese Network
- Development of an Automatic Garbage Sorting Machine Combined With Portable Camera and Raspberry Pi using Image Recognition

## PUBLICATIONS

### Published

- Azam, F., Ansari, I., McLane, I., & Hasan, T. (2022). Additive and convolutional distortion, stethoscope variability, heart sound classification. *Artificial Intelligence in Medicine*.
- Humayun, A., Ghaffarzadegan, S., Ansari, I., Feng, Z., & Hasan, T. (2020). Towards domain invariant heart sound abnormality detection using learnable filterbanks. *IEEE journal of biomedical and health informatics* 24 (8), 2189-2198.


### Submitted (Under Review)

- Ansari, I., & Hasan, T. (2022). *Spectnet : End-to-end audio signal classification using learnable spectrogram features*.

## EDUCATION

### B.Sc. in Electrical and Electronic Engineering

Bangladesh University of Engineering and Technology

 Feb 2015 – Aug 2019

CGPA - 3.05 out of 4.00

Key Courses : Digital Signal Processing, Random Signal Processing, Communication Theory, Control Theory, Biomedical Instrumentation

## RESEARCH INTERESTS

- Machine Learning
- Signal Processing
- Image Processing
- Computer Vision
- NLP
- Reinforcement Learning

## SKILLS

### Programming Contest and Problem Solving Experience with C, C++ on Codeforces and LightOj

- Data Structure
- Graph Theory
- Dynamic Programming
- String Algorithms

### Deep Learning

- Python
- Pytorch
- Keras

### Hardware and Circuit Design

- PSpice
- Quartus
- Proteus
- Eagle
- Arduino
- Raspberry Pi

### Software/Web Development

- JAVA
- C
- Adobe Muse
- AngularJS
- HTML
- CSS

## LANGUAGES

English  
Bangla  
Hindi

