

# Md. Zahidul Islam

Lecturer, Dept. of Computer Science & Engineering, Islamic University of Technology

@ zahidulislam@iut-dhaka.edu

+8801753638013

https://zahid58.github.io/

github.com/zahid58

IUT, Dhaka, Bangladesh

linkedin.com/in/zahid58

## Education

### Islamic University of Technology (IUT)

Dhaka, Bangladesh

Jan 2017 – March 2021

B.Sc. in Computer Science and Engineering (CSE)

CGPA – 3.99/4.00, Ranked 1<sup>st</sup> in class of 86

Thesis – Efficient Two-Stream Network for Violence Detection Using Separable Convolutional LSTM

Supervisor – Dr. Md. Hasanul Kabir

- **Notable Courses** - Digital Image Processing, Machine Learning, Artificial Intelligence, Numerical Methods, Database Management System, Algorithms, Data Structure, Object Oriented Programming

### Cumilla Cadet College

Cumilla, Bangladesh

2010 – 2016

- Higher Secondary Certificate (HSC), 2016 – GPA: 5.00/5.00, Ranked 3<sup>rd</sup> in Cumilla Education Board
- Secondary School Certificate (SSC), 2014 – GPA: 5.00/5.00, Ranked 1<sup>st</sup> in Cumilla Education Board

## Professional Experience

### Islamic University of Technology

Dhaka, Bangladesh

July 2021 – Present

Lecturer, Dept. of Computer Science and Engineering

- **Courses Conducted** - Computing for Engineers
- **Labs Conducted** - Data Structures, Microprocessor and Assembly Language, Engineering Drawing

### Apurba Technologies Ltd.

Dhaka, Bangladesh

March 2021 – June 2021

Machine Learning Engineer

- Worked on research and development of large-scale Bangla OCR systems.
- Development & integration of image processing and machine learning based methods for computer vision tasks.

### Samsung R & D Institute Bangladesh

Dhaka, Bangladesh

Nov 2019 – Jan 2020

Intern, Mobile Application Development

- Worked on recognition of human walking patterns with smartphone accelerometer data using deep learning techniques to identify real user of smartphone.

## Research Experience

[ORCID](#)

### Publications

- [1] Zahidul Islam, Mohammad Rukonuzzaman, Raiyan Ahmed, Md. Hasanul Kabir, Moshir Farazi  
“Efficient Two-Stream Network for Violence Detection Using Separable Convolutional LSTM”  
Presented in International Joint Conference on Neural Networks (IJCNN), 2021 [In Press] [Paper](#)

### Reviewing Experience

- Worked as a reviewer for the journal **IEEE Access** (x2) June 2021
- Worked as a reviewer for the journal **Applied Artificial Intelligence** (AAAI) Aug 2021

### Field of Interest

- Computer Vision
- Deep Learning
- Digital Image Processing
- Pattern Recognition

## Skills

- **Languages** - Python, Java, C++, C, SQL
- **Deep Learning & Machine Learning** - Tensorflow, PyTorch, Scikit-learn
- **Image Processing** - OpenCV, MATLAB
- **Web** - HTML, CSS, JS (frontend)
- **OS** - UNIX shell, x86 Assembly

## Online Courses

---

- **Deep Learning Specialization**, DeepLearning.AI, Coursera, [Verify](#) Feb 2020
- **TensorFlow Developer**, DeepLearning.AI, Coursera, [Verify](#) April 2020
- **Machine Learning**, Stanford University, Coursera, [Verify](#) Aug 2019

## Projects

---

[www.github.com/zahid58](https://www.github.com/zahid58)

### Inpainter

*Python, PyQt, OpenCV*

- A python GUI application that lets you fill up missing or damaged areas or remove foreground objects from images easily.

### Traffic Sign Localization and Recognition

*Python, Tensorflow*

- A two stage system where at first, region of interests likely to contain traffic signs are found out using *Voila-Jones* object detection algorithm. Then, a deep neural network recognizes the traffic signs.

### EasyScan OCR Whiteboard

*Python, OpenCV, Tesseract*

- A interactive GUI digital whiteboard with live handwriting recognition (OCR). This feature allows saving whiteboard sessions as texts and helps improve the understandability of the handwriting.

### Tsaurus

*Node JS, Python, OpenCV*

- Helps children learn new words in a fun way by simply taking photo of text. The software fetches relevant images, dictionary meaning etc. from internet. It uses OCR and webscrapping tools.

### Inverse Kinematics

*Python, Sympy, Matplotlib*

- Automates the movement of a robotic arm with 6 degrees of freedom and visualizes it using an easy to use graphical interface.

## Awards & Accolades

---

### European Rover Challenge

2019, 2018

- Achieved 15th position in ERC 2019 and 14th position (best among Asian teams) in ERC 2018 with Team IUT Mars Rover. Worked on robotic arm manipulation and cache retrieval using image processing.

### Matlab Coding Challenge

2020, 2019

- Champion in Matlab Mania at *Horizon 2020*, organized by KUET.
- Champion in Matlab Challenge at *Esonance 2019*, organized by dept. of EEE, IUT.

### ICT Olympiad

2019

- Champion in ICT Olympiad at IUT 10th ICT Fest organized by dept. of CSE, IUT.

### Line Following Robot Racing

2018

- Runners up in LFR Racing at *Technovision* organized by ECE dept., North South University.

### Programming Contest

2017

- 4th position in Intra IUT programming contest.

### Scholarships

2016, 2014

- OIC Scholarship for undergraduate study at IUT, by Organization of Islamic Cooperation (OIC)
- Govt. Scholarships for HSC and SSC results, by Bangladesh Education board

## Reference

---

### Dr. Md. Hasanul Kabir

Professor,  
Dept. of Computer Science and Engineering,  
Islamic University of Technology (IUT),  
Email: [hasanul@iut-dhaka.edu](mailto:hasanul@iut-dhaka.edu),  
Phone: +8801715007049

### Abu Raihan Mostofa Kamal

Professor and Head of the Dept.,  
Dept. of Computer Science and Engineering,  
Islamic University of Technology (IUT),  
Email: [raihan.kamal@iut-dhaka.edu](mailto:raihan.kamal@iut-dhaka.edu)  
Phone: +8801843925543