

# SAIFUL ISLAM

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## EXPERIENCE

### Sincos Automation Technologies Ltd.

Software Engineer (R&D)

March 2023 - Present

Dhaka, BD — Full Time

- Built Manufacturing Control Tower (MCT) Software for **Unilever Bangladesh**
- Responsible for Requirement Analysis and System Architecture Design
- Developing Backend API using NodeJs
- Developing Database Architecture for Applications

### Spectrum Engineering Consortium Ltd.

Associate Software Engineer

February 2021 - February 2023

Dhaka, BD — Full Time

- Built Multiple complete Software for '**National Board of Revenue (NBR)**' for Modern and Automated Ways of Both Existing and New Systems
- Partially Worked with the **ML** Team to Implement Research Paper and Contribute to the Workflow
- Contributed in **SDLC**, from Requirements Definition to Successful Deployment
- Developed **REST APIs** Using Java Spring Boot and Managed API security
- Worked Closely with Clients to Establish Problem Specifications, System and Database Designs
- Tested, Coded, Reviewed, and Delivered Software with on-time Record and According to Service Level Objectives

## EDUCATION

### Ahsanullah University of Science and Technology

B.Sc. in Computer Science & Engineering

Total Credits Completed: 161.25 out of 161.25

**Thesis:** Deep Learning Based Video Captioning in Bengali

**Thesis Supervisor:** Faisal Mahmud Shah

March 2016 - December 2020

CGPA: 2.964 out of 4

## PUBLICATIONS

### 0.1 Journal Article

- **Islam, Saiful**, Aurpan Dash, Ashek Seum, Amir Hossain Raj, Tonmoy Hossain, and Faisal Muhammad Shah. Exploring video captioning techniques: A comprehensive survey on deep learning methods. *SN Computer Science*, 2(2):1–28, 2021

### 0.2 Conference Proceedings

- Amir Hossain Raj, Ashek Seum, Aurpan Dash, **Islam, Saiful**, and Faisal Muhammad Shah. Deep learning based video captioning in bengali. In *2021 26th International Conference on Automation and Computing (ICAC)*, pages 1–6. IEEE, 2021
- Md Islam, Monjurul Haque, **Islam, Saiful**, Md Mia, Zesun Ahmed, SMA Rahman, et al. Dcnm-lstm based audio classification combining multiple feature engineering and data augmentation techniques. In *International Conference on Intelligent Computing & Optimization*, pages 227–236. Springer, 2021
- Md Zesun Ahmed Mia, Md Moinul Islam, Monjurul Haque, **Islam, Saiful**, and SMA Mohaiminur Rahman. Irfd: A feature engineering based ensemble classification for detecting electricity fraud in traditional meters. In *2021 24th International Conference on Computer and Information Technology (ICCIT)*, pages 1–6. IEEE, 2021

## RESEARCH INTERESTS

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Neural Networks, Computer Vision, Generative Networks

## TECHNICAL STRENGTHS

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<b>Programming Language</b>	Python, C/C++, JavaScript, Java
<b>Machine Learning Frameworks</b>	PyTorch, Keras, TensorFlow
<b>Python Library</b>	Scikit-learn, OpenCV
<b>Databases</b>	MySQL, PostgreSQL, Microsoft SQL, Hibernate
<b>Web Frameworks</b>	Angular, Spring Boot, Spring Security
<b>Protocols &amp; APIs</b>	JSON, XML, MQTT, REST
<b>Operating Systems</b>	Windows, Linux Distro
<b>Others</b>	Git, Docker, JWT, Node-RED, Shell scripting, LaTeX (Overleaf)

## ACADEMIC PROJECTS

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- Vision Transformer From Scratch *Tools: Pytorch*  
Vision Transformer Paper Implementation with Some Minor Changes
- Detection of Plastics in River *Tools: YOLOv8*  
Detecting Various Plastics in River Water using Ultralytics YOLOv8
- U-NET From Scratch *Tools: Pytorch*  
Original U-NET Paper Implementation
- Stock Prediction Forecasting *Tools: TensorFlow*  
Prediction and Forecasting on Microsoft Stock Data using Stacked LSTM
- Vanilla GAN From Scratch *Tools: Pytorch*  
Original GAN Paper Implementation with Some Minor Changes
- Variational Autoencoder (VAE) From Scratch *Tools: Pytorch*  
Original VAE Paper Implementation with Some Minor Changes
- Stanford Cars Classification *Tools: PyTorch*  
Classification on Stanford Cars Dataset using Pre-trained models

## PARTICIPATION AND WORKSHOP

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- Participation at Robi Datathon 2.0 (2022)
- Participation in Hackathon at FormulaAI Hack 2022
- Participation in Idea Contest at DU FABFEST-2018
- Participation in Hackathon at BUP ICT FEST-2018
- Participation in Project Showcase (Software) at CODEWARE-2018, AUST
- Completion of 5-session Long Workshop on Soft Skills at BUET ROSTRUM Season 3
- Participation in Programming Contest at Intra AUST Programming Contest Fall 2017

## EXTRA-CURRICULAR ACTIVITIES

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- Volunteer, Mozilla
  - Contributor at Pontoon
  - Contributor at Common Voice
  - Attended Mozilla Localization Dhaka Meetup 2019
- Student Member at IEEE *Jan 2019 - Jun 2020*
- Volunteer at IEEE AUST Student Branch *Jan 2019 - Jun 2020*
- Campus Ambassador at BUET Career Club *Nov 2018 - Jun 2020*

## ONLINE CERTIFICATIONS

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- (Google Cloud) Baseline: Data, ML, AI
- (Google Cloud) Intro to ML: Language Processing
- (Google Cloud) Reinforcement Learning: Qwik Start
- (DeepLearning.AI) Neural Networks and Deep Learning
- (Coursera) Understanding Deepfakes with Keras
- (Coursera) Neural Style Transfer with TensorFlow
- (DeepLearning.AI) Natural Language Processing in TensorFlow
- (Coursera) Deep Learning with PyTorch : Image Segmentation

## REFERENCE

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