

# Mustahid Ahmed

Last updated: February 27, 2023

Online Version

<https://ahmedmustahid.github.io/html-cv>

## Residence

Tokyo, Japan

## Nationality

Bangladesh

## Git Profile

<https://github.com/ahmedmustahid>

## Email

[amustahid25@gmail.com](mailto:amustahid25@gmail.com)

Python	++++	C++17	++++	C	++++	Dart/Flutter	++++	Swift	+++	Azure	+++
AWS	++++	Statistics	++++	Image	++++	NLP	+++	Algorithms	++++	Data	++++
				Processing						Structure	

## Professional Experience

### Sensyn Robotics

#### Machine Learning Engineer

May 2022 - Present

### HyperCube Ltd.

#### Machine Learning Engineer

April 2020 - May 2022

### Self employed

#### Software Engineer

April 2020 - Present

## Projects

### Crack segmentation from tiles,Sensyn Robotics

Feb 2023 - Present

Implementing model for crack segmentation using novel transformer based segmentation architecture

[Python](#) [Pytorch](#) [OpenCV](#) [mmcv](#)

### Analog gauge reading by computer vision,Sensyn Robotics

November 2022 - Present

Implemented and deployed model for analog gauge reading from web cam in Nvidia Jetson Nano

[Python](#) [Pytorch](#) [OpenCV](#) [onnx](#) [mmcv](#) [Apache TVM](#)

## Extraction of information of documents using deep learning methods,Sensyn Robotics

August 2022 - October 2022

Extracting and organizing information from documents using deep learning

[Python](#) [Pytorch](#) [OpenCV](#) [Tesseract OCR](#)

## People detection from fish eye images,Sensyn Robotics

May 2022 - July 2022

Because commonly used algorithms are not suitable for fish eye images, implemented new algorithm that can detect people in such images.

[Python](#) [Pytorch](#) [OpenCV](#)

## NLP based Chatbot, HyperCube Ltd.

June 2021 - October 2021

Model deployment, system design and maintenance using AWS Amplify, AWS Api Gateway, AWS Lambda, AWS Sagemaker.

Front and backend development using Flutter/Dart/Swift programming languages.

[AWS](#) [Dart/flutter](#) [Swift](#) [Docker](#) [Git](#)

## Database design and deployment, HyperCube Ltd.

March 2021 – May 2021

Designed MySQL database schema and deployed it in Azure.

Using web application API to connect web app with the database.

[MySQL](#) [Azure](#) [Python](#) [Git](#)

## Supply Chain Optimization, HyperCube Ltd.

December 2020 - February 2021

Research on optimization problems.

Using linear programming and integer programming methodologies in Gurobi Python and C++ for supply chain optimization.

[Python](#) [C++](#) [Git](#)

## Video Anomaly Detection, HyperCube Ltd.

May 2020 - November 2020

Research on deep learning based activity detection algorithms.

Constructing and deploying algorithm to detect anomalous events in video.

Transferring the analysis data to Azure DB deployed in cloud.

[Python](#) [OpenCV](#) [PyTorch](#) [MySQL](#) [Azure](#) [Docker](#) [Git](#)

## Memorize: A game for training memory, Self employed

June 2021 - Present

Designing front end and game logic in Swift programming language.

[Swift](#) [Git](#)

## Academic Qualifications

Tohoku University Sendai, Japan

MSc. Elementary Particle Physics [2018 - 2020]

Tohoku University Sendai, Japan

BSc. Physics [2014 - 2018]

Tokyo University of Foreign Studies Tokyo, Japan

Associate Degree, Japanese Language [2013 - 2014]

## Research/Talks

### Masters Thesis : Machine Learning, Deep Learning, Data Analysis

Simulation of particle collisions and their reaction in particle detectors using C++.  
Designing particle detectors using C++ framework.  
Analyzing data read by particle detectors using machine learning and deep learning algorithms.

[Python](#) [OpenCV](#) [PyTorch](#) [C++](#) [Git](#) [CMake](#)

### Conference Presentation: Japan Physical Society Annual Meeting

Full Detector Simulation of Pair Monitor and Application of Machine Learning to Determine  
Determine Beam Size  
Nagoya University, Nagoya, Japan [March '20]

### Conference Presentation : International Workshop on Future Linear Colliders

Search for weakly interacting dark matter in the International Linear Collider  
University of Texas, Arlington, Texas, USA. [Oct '18]

## Language Skills

English, Business Level, TOEFL iBT 110  
Japanese: Business Level  
Bengali: Native Level

## MOOCs

- [Deep Learning Specialization](#) : Coursera, Stanford Online
- [Algorithm Specialization](#) : Coursera, Stanford Online
- [GAN Specialization](#) : Coursera, Stanford Online
- [NLP Specialization](#) : Coursera, Stanford Online

Categories: [Python](#) [C++](#) [Algorithms](#) [Deep Learning](#)

