

MD. SAIFUL ISLAM

(+88) 01680071897

saiful.somum@gmail.com

github.com/somum

somum.github.io/somum/

linkedin.com/in/saiful-somum/

1/5, Shipahibagh, Khilgaon, Dhaka-1219



CARRIER OBJECTIVE

Innovative and self-motivated engineer with significant data science experience to bring to the table. Focused and detail-oriented, offering exceptional troubleshooting skills and a seeker for developing innovative solutions to unusual and difficult problems and strives to build reusable tools and solutions to achieve repeatable quality results.

TECHNICAL STRENGTHS

Programming Languages	Python, Java, C++, JavaScript, MATLAB
Framework & Library	Django, Flask, ReactJS, Tensorflow, Keras, OpenCV, NumPy, Pandas, Matplotlib, Scikit-learn
Database	SQL, Oracle PL/SQL, MongoDB
Others	Docker, Git

WORK EXPERIENCE

IRITA INFORMATION TECHNOLOGY LTD. October, 2020 - December, 2020
Assistant Programmer

- Involved in stages such as analysis and design, development.
- Unit testing and debugging of management service for Agro-related issues.
- Built back-end web services using Flask, MongoDB and REST API.

SAir AIR BD LTD. (GSA of Himalaya Airlines) August, 2019 - February, 2020
Software Engineer

- Implementing facial recognition based employee attendance system.
- Data analysis of airlines through GDS, OTA system developing using Django framework.
- ERP system development (account, customer relation, production materials).

EDUCATION

Ahsanullah University of Science & Technology, Dhaka 2015 - 2019
B.Sc. in Computer Science & Engineering Cumulative G.P.A.: 2.77

National Ideal School & College, Dhaka 2012 - 2014
Higher Secondary Certificate (HSC) G.P.A.: 5.00

National Ideal School & College, Dhaka 2001 - 2012
Secondary School Certificate (SSC) G.P.A.: 5.00

PUBLICATIONS

- [Conference] Real Time Bangladeshi Sign Language Detection using Faster R-CNN
2018 International Conference on Innovation in Engineering and Technology (ICIET),
Dhaka, Bangladesh.
Read details: *IEEE Xplore Link*.

- [Workshop] **BdSL36: A Dataset for Bangladeshi Sign Letters Recognition**
The 15th Asian Conference on Computer Vision(ACCV), 2020, Kyoto, Japan.
Read details: *Springer Link*.
- [Chapter] **Deep Learning Based Industrial Fault Diagnosis Using Induction Motor Bearing Signal (Accepted)**
IGI Book project: Applied AI for Multimedia Technologies and CPS Applications.
Read details: *Pre-publish document*.

PROFESSIONAL / CLIENT BASED PROJECTS

Market basket analysis & demand forecast (Time series forecasting)

- Developed deep Learning based feature to predict product demand for next 7 days and 1/2 baskets with item for next purchase.
- Data pre-processing and training of custom 'Long Short-Term Memory (LSTM)' model.
- Prepared dynamic evaluation of features in front-end.

Used tools: Python, Tensorflow, NumPy, Pandas, Matplotlib, Scikit-learn.

Demo: *Project link*

Real-time Hair Color Simulation

- Built AI feature for e-commerce platform that sells hair color where customer can use the feature before buying.
- Collecting, cleaning and preprocessing 26,918 data.
- Developed U-net based MobilenetV2 model and custom coloring method.

Used tools: Python, Tensorflow, OpenCV, NumPy, Pandas, Matplotlib, Scikit-learn, Flask, REST.

Demo: *Project link*

Product Recommendation System

- Cleaning, gathering & modification data of products ratings from users.
- Implementation of Restricted Boltzmann Machines(RBM) model after normalizing data.
- Preparing structure for showing product recommendation for individual users.

Used tools: Python, Tensorflow, NumPy, Pandas, Matplotlib. || pptx: *Project link*

Facial Recognition Based Employee Attendance System

- Implemented transfer learning *VGG19* with haar cascade feature extraction to develop an attendance solution.
- Built Tkinter based user interface.

Used Tools: Python, Keras, VGG19, Tkinter. || Demo: *Project link 1 - Project link 2*

Sair Air BD

- Using Django as back-end built Online Travel Agency site.
- Develop & management of visa processing service.

Used Tools: Django 2.2, Bootstrap, jQuery, SQLite. || live: www.sair-bd.com

ERP System

- Design and develop components of passenger information management service.
- Establish customized invoices for billing.
- Troubleshooting issues by the feedback of company. Hands on support after implementation.

Used Tools: PHP, JavaScript, AJAX, Bootstrap, MySQL

live: <https://cmd.sairbd.com/> || pptx: *Project link*

ENTHUSIASMS

Data Processing

Big Data

Neural Network

Deep Learning, Computer vision

CERTIFICATIONS

- **Intel Edge AI Scholarship Foundation Course**

Transfer learning - Model optimizer - Inference Engine (OpenVINO, ONNX) - Deploying an edge app. || See credential: *Certificate link*.

- **Deep Learning Prerequisites: The Numpy Stack in Python (V2+)**

NumPy - SciPy - Pandas - Matplotlib - ML Algorithms. || See credential: *Certificate Link*.

- Achieved **"Gold Level"** in *Problem Solving* & *emphPython* in HackerRank platform.

See credential: *HackerRank Link*.

REFERENCES

Prof. Kazi A. Kalpoma

Department of CSE

Ahsanullah University of Science & Technology

kolpoma@gmail.com, +88-01819-127854

Mohammad Imrul Jubair

Assistant Professor, Department of CSE

Ahsanullah University of Science & Technology

imrul.jubair@gmail.com, +88-01722-682783