# Mehedi Imam Shafi

#### SOFTWARE ENGINEER · R&D ENGINEER

1599 Nurpur, South Dania, Dhaka - 1236, Bangladesh

🛮 (+880) 1920-884121 | 🗷 mehedishafi@hotmail.com | 😭 mehedi-shafi.github.io | 🖸 mehedi-shafi | 🛅 mehedi-shafi

## Skills

**Back-end** Django, Flask **Front-end** ReactJS

**Programming** Python, JavaScript, Type Script, Kotlin, Java

Database PostgreSQL, MySQL

Misc AWS(S3, EC2), Docker, GitHub Action, Tensorflow, Keras, D-Lib, YOLO-V3

## **Work Experience**

#### Progoti Systems Ltd, SureCash

Dhaka, Bangladesh

SOFTWARE ENGINEER(FULL STACK)

December 2020 - May 2022

- Designed the scoring a system module that accounts for over 200 data attributes and over 500 rules for the microcredit system, TallyCredit
- Containerized the project for easier deployment and development process using Docker and docker-compose. It contains 4 services with their dependencies. Improved deployment process to different VPS using different Linux distributions. Furthermore, it enabled multi-branch testing simultaneously.
- Implemented a public interface for users to interact with their data securely without needing to log in. Will let about 3+ million active users access and update their data without having to create just another account.
- Built an android app for collecting data directly to the system and control field officers interaction with users. Eliminated the required paperwork using excel to collect data. The app's input layout can be re-configured with zero downtime from the backend directly.

### **CodeMarshal IT Systems Ltd**

Dhaka, Bangladesh

R & D ENGINEER

February 2019 - November 2020

- Worked on an API that uses Tesseract and Tensorflow to extract textual data from received identification cards and validate using 3rd party API. This is a part of the e-KYC system.
- Architected an API to run face verification. Initially, it was using DLIB then moved to use YOLO-v3, and finally moved to Retinaface. The final service runs on Apache MXNET model-server and the previous ones on Flask.
- Improved performance of android SDK capable of running face detection and verification real-time and offline using TFLite by over 200% by optimizing the model and vectorizing image operations. Later nid-detection was added to the SDK.

## **Projects**

#### **Word Scrabble Bot**

**⊘**/word-scrabble-bot

#### A PROGRAM THAT USES OCR AND PATH FINDING ALGORITHM TO PLAY WORD SCRABBLE

It's a fun game playing bots that takes a screenshot of the word-scrabble game and finds possible moves based on available letters, extracted using Tesseract OCR. All possible correct words with the extracted characters are sorted by the length in descending order as sequential moves. It can score 3x more than a human player within 60s time limit of the game without being detected as a bot.

#### **Django-React-Boilerplate**

**⊙**/django-react-boilerplate

A SIMPLE DJANGO REACT BOILERPLATE WITH BARE MINIMUM CONFIGURATION

Django backend is set up with Django-rest-framework for REST API and Djsoer for token-based authentication. Swagger support for automated rest API documentation and live testing. React configured with @material-ui for styling. Comes with a login page and functionality. Also it's Dockerized to get going faster. It has the potential of starting up new projects within as fast as 5 minutes.

#### **CF Solve Tracker**

 ${\it O}/{\it cf_solve_t} racker$ 

#### A API FOR TRACKING SOLVES OF INDIVIDUAL ON CONTESTS

An API that returns the number of solves during a given contest and after-contest practice submissions for individual users. It uses CodeForce's API to get contest-wise submission data and generates user-specific effort for that contest. It's actively being used in Daffotil International University's contest tracking system for contest programmers. Everyday it serves at least 50 active contest programmers to track their progress.

## Presentation

**Docker Talk**Progoti Systems Ltd

SPEAKER

A session to introduce docker and demonstrate how to dockerize a project and use docker-compose to automate multi-container setups

### **Workshop on Machine Learning**

Uni. of Liberal Arts Bangladesh

TRAINER

An hands on training for final year students to basic ML and DL algorithms using different frameworks

July 11, 2022 MEHEDI SHAFI RÉSUMÉ

## A Glimpse or Artificial Intelligence

University of Asia Pacific

KEY-NOTE SPEAKER

An introductory session for 1st and 2nd year undergrad students to Aritificial Intelligence and its applications in our day to day life.

## **Education**

### **B.SC IN COMPUTER SCIENCE AND ENGINEERING**

Dhaka, Bangladesh

DAFFODIL INTERNATIONAL UNIVERSITY

January 2015 - December 2018