



Md. Mainul Ahsan

Associate Software Engineer

CONTACT



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GitHub

<https://github.com/Swaad>



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TECHNICAL SKILLS

- C, C++, Python, C#, JAVA(Android)
- Project architecture design & management
- Project Deployment
- Data structures & algorithms
- Competitive programming
- Frameworks: Python Flask, Python Fast, ASP.Net, Angular
- Database: MySQL, Oracle, SQLite
- Object-relational Mapper (ORM)
- Architecture: Onion architecture, microservices architecture
- Web Design: HTML, PHP
- Web API, Rest API
- Socket.IO
- Scrum master
- Status tracking frameworks (Jira)
- Git
- Language: Bangla, English, Hindi
- RESEARCH AREAS: NLP

EXPERIENCE

Era-InfoTech Limited

Intern -- (Dec 2021 - Feb 2022)

Trainee Software Engineer -- (Mar 2022 - Mar 2023)

Associate Software Engineer -- (Apr 2023 - Present)

- Developed web application using **microservice** and **onion architecture**
- Built software & web applications using **Python** and **Android-Java**
- Python Flask and Fast framework with **web API**.
- Python **SQLAlchemy ORM** for DB (MySQL, Oracle)

Company Projects:

- Digital Nano Loan (Bank Asia, UCB):

A project that aims to score the credit capability of an individual using metadata (using **Android-Java**) and banking CBS data(using **Python**). This project is being developed using the **onion architecture in microservices**.

(Financial part) Front-end: Angular

(Client Meta part) Front-end: Android / Java

Admin Backend: Python Flask & Fast Framework

Database: MySQL & Oracle

- People Hub Collaboration tool (SBL):

A people management platform that helps organizations to manage their valuable assets of people that includes **chatting features** such as Skype using **python socket.io**

This project is being developed using the **onion architecture in microservices**.

Front-end: Angular

Backend: Python Fast framework & socket.io

Database: MySQL

- Active Directory:

LDAP provides a means to manage user and group membership stored in Active Directory. LDAP is a protocol to authenticate and authorize granular access to IT resources, while Active Directory is a database of user and group information.

Backend: ASP.NET

EDUCATION

University: Ahsanullah University of Science and Technology.

[2017 - 2021]

Department: Computer science and engineering (CSE).

Thesis: Transformer-Based Deep Learning Model for Stock Price Prediction: A Case Study on Bangladesh Stock Market.

CGPA: 3.136

College: Dhaka College.

[2014 - 2016]

Result: Golden GPA 5.

School: Ideal School & College, Motijheel, Dhaka.

[2004 - 2014]

Result: Golden GPA 5.

PROJECT DEPLOYMENT

- **Linux (Oracle / RedHat) server:** python project using service
- **Windows server:** Python project and .net project (publish file)
- **Apache Tomcat:** Angular project deployment
- **AWS server:** Deployed python fastApi project and launched

PROBLEM SOLVING

- **Code Forces:** 120+ solves
- **LeetCode:** 200+ solves
- **URI:** 50+ solves
- **AUST programming contestant**

ACHIEVEMENTS & CERTIFICATIONS

- **1st prize** in Software development competition (android) at Ahsanullah University of Science & Technology (AUST).
- **2nd runner up** in 'ESONANCE' tech fest at Islamic University of Technology (IUT) in Soccer Robot competition.
- **4th place** in Soccer Robot competition of 'Mindspark' tech fest of AUST.
- **Software development** (IOS) certificate form Bangladesh government
- **2 projects** have gone live while working in ERA

PUBLICATIONS

- Transformer-Based Deep Learning Model for Stock Price Prediction: A Case Study on Bangladesh Stock Market.
Link:<https://www.worldscientific.com/doi/10.1142/S146902682350013X>
- An intelligent wind turbine with yaw mechanism using machine learning to reduce high-cost sensors quantity.
Link:<https://ijeecs.iaescore.com/index.php/IJECS/article/view/29384>

PERSONAL PROJECTS

- **Android Text And Play:**

Users can play a single-player game here and the high scores will be saved. So that all the players can see each other's scores and compare their scores with each other. Here players can text each other using Firebase Realtime Database

Tools: Android Java & Socket.io

Database: Firebase Realtime Database

GitHub Link: <https://github.com/Swaad/Android-Text-And-Play>

- **Inventory System:**

A basic inventory system for a store to keep the product's buy and sell status updated.

Front-end: HTML, CSS & Bootstrap

Backend: Python Flask framework

Database: MySQL

GitHub Link: <https://github.com/Swaad/Inventory-System>

REFERENCE

1. Prof. Dr. Mohammad Shafiul Alam

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