



Adiba Sumaiya Khan

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House- 34, Victoria Street, Road-1 , Block-A, Bashundhara R/A, 1229, Dhaka, Bangladesh

About me: A tech enthusiast, who likes to apply her knowledge and skill wherever it is required. Eager to learn and loves to explore

WORK EXPERIENCE

30/06/2020 – CURRENT – Dhaka, Bangladesh

ASSISTANT SOFTWARE ENGINEER – ERA-INFOTECH LTD.

- Developed full-stack web application in Angular, Nodejs, DynamoDB and hosted in AWS server.
- Responsible for solution design: Collaborate with internal and external customers by providing customer use case analysis, business model analysis, engineering and design of technical solutions, technical presentations, and technical consultation to internal and external customers.
- Act as a technical liaison between customers, service engineering teams, and support.

30/06/2019 – 29/06/2020 – Dhaka, Bangladesh

TRAINEE SOFTWARE ENGINEER – ERA-INFOTECH LTD.

- Implementation of IOT device with AWS IOT hub using AWS IoT MQTT.
- Assist in the evaluation of new solutions for integration into the IoT Roadmap/Strategy
- Working knowledge on IoT Strategy, standards, protocols
- Hands-on experience with constrained devices such as Arduino, RaspberryPI and ARM
- Used AWS kinesis for live video streaming from client side

31/07/2018 – 30/03/2020 – Dhaka, Bangladesh

UNIVERSITY RESEARCH ASSISTANT – NORTH SOUTH UNIVERSITY

Research Assistant under the Supervision of Mr. Rashed Shelim (URL: <http://ece.northsouth.edu/people/rashed-shelim/>).

Research Areas- 5G Network Modeling, 5G User Mobility, Fronthaul, Resource Allocation, Game Theory, PID Control, Cloud Computing

TECHNICAL SKILLS

Front End

- Javascript, Angular, ReactJS, Typescript, ES6+
- HTML,CSS, Angular Material, Bootstrap

Back End

- Node.js, Serverless, Express.js
- DynamoDB, MySQL
- RestAPI, Microservices Architecture

Cloud Architecture

- Used Cognito User and Identity pool as UMS, AWS Api Gateway, AWS Lambda, Amplify, S3 Bucket, Route 53, Implementation of IOT device with AWS IOT hub using AWS IoT MQTT, CloudFront, CloudFormation
- Git, CI/CD

Programming Languages

- C, C++, C#, JavaScript

● EDUCATION AND TRAINING

01/02/2014 – 09/01/2019 – Plot- 15, Block-B, Bashundhara R/A, Dhaka, Bangladesh

BACHELORS OF ELECTRICAL AND ELECTRONICS ENGINEERING – North South University

3.23 out of 4 | <http://www.northsouth.edu/>

31/05/2013 – 29/06/2013 – British Council, 5 Fuller Road, Dhaka 1000, Dhaka, Bangladesh

A LEVELS – British Council

<https://www.britishcouncil.org.bd/en>

31/05/2010 – 29/06/2010 – Plot 2, Road 8 & 9, Sector-1 , Uttara, Dhaka , Bangladesh

O LEVELS – Scholastica

<http://www.scholasticabd.com/>

● LANGUAGE SKILLS

Mother tongue(s): **BENGALI**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	B2	C1	C1	B2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● PROJECTS

30/06/2019 – 01/02/2020

Fleet management

<https://trukiot.com/>

<http://prod.streatlogistics.trukiot.com/>

<http://test.streatlogistics.client.trukiot.com/account/login>

This is basically an ERP system for a truck management company to manage the truck hiring process between 3 different entities which are customer, admin and partner. Therefore made 3 different platform

for these entities so they could complete the whole cycle of truck hiring, trip management with loaded products and account module to perform the financial transaction. This application is made in Angular, Backend in NodeJS in Document Client Orm and hosted in AWS Server. This project includes devices made to ensure total security of trucks and fleets. Creating IoT Backend System using AWS IoT Core Message Broker and AWS Thing Shadow for pub/sub with devices and Thing Shadow and Frontend. Worked with Raspberry Pi for Pi camera Live Streaming Using AWS Kinesis Video Streaming, CloudFront, CloudFormation And S3 Bucket.

09/07/2021 – 09/09/2021

User Management System

User Management System for all the projects of our Company. Complete stack for this project was C#, ASP.NET, MVC Pattern Entity Framework, Angular Material, Typescript, Web API, SQL Database and Angular 9.

● **PUBLICATIONS**

A Novel Approach to Mitigate the Intensity Underestimation Problem Of Classical MHCPP in 5G Small Cell Networks

DOI: 10.1109/IEECON48109.2020.229580

<https://ieeexplore.ieee.org/document/9077414> – 2020

In this paper, we propose a novel model called Displaced Offspring Hard Core Point Process (DO-HCPP) by applying displacement theorem to shift the discs through a predefined angle in an iterative manner to obtain the maximum achievable intensity in a given region. Simulation results show that the intensity is much higher for our proposed model compared to traditional MHCPP.

https://www.researchgate.net/publication/340162560_A_Novel_Approach_to_Mitigate_the_Intensity_Underestimation_Problem_Of_Classical_MHCPP_in_5G_Small_Cell_Networks

Safe Sailing: GSM and GPS Controlled Autonomous Boat with Overweight Detection and Obstacle Avoidance

DOI: 10.11591/ijeecs.v14.i2.pp715-724

<http://ijeecs.iaescore.com/index.php/IJECS/article/view/16842> – 2019

This paper aims to save thousands of lives by proposing a novel technique of ensuring the complete safety of medium-sized aquatic vehicles using innovative ideas as well as augmented adaptations of myriad existing technologies.

<http://ijeecs.iaescore.com/index.php/IJECS/article/view/16842>

● **REFERENCES**

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