

NISHAT ANJUM

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Summary

Senior Software Engineer with 9+ years of remarkable background in designing and developing enterprise level software solutions. My expertise lies in JAVA and JVM based technology stack, software design patterns and development methodologies. After scrutinizing my passion, extensive work experience and final ambition, I have decided to pursue a research oriented Masters Program in my field of interest which I believe will lead me to a career of Computer and Information research scientist.

Education

University of Dhaka

Dhaka, Bangladesh

BSc. (Honours) in Computer Science and Engineering

2008 - 2012

- **CGPA:** 3.37/4.00 (3.40 in last 2 academic years)
- **Merit Position:** 14th out of 45 students
- **Courses:** Software Engineering, Database Management System, Operating System, Computer Networks, Data Communication, Data Structures, Algorithms, Discrete Mathematics, Theory of Computation, Database, Artificial Intelligence
- **IELTS:** Overall Band Score **7.5** [L-9, R-7.5, W-7, S-6.5]

Research Interests

Software Engineering, Empirical Software Engineering, Database and knowledge-base systems, Data Mining, Data Visualization, Human Computer Interaction, Distributed Computing.

Academic Research

Title: Throughput Maximization in Device to Device(D2D) Enabled Cellular Network

University Of Dhaka

Supervisor: Professor Md. Abbdur Razzaque

2012

- In this work, We addressed the spectrum sharing problem between cellular and underlaying D2D communication in a **non-orthogonal sharing mode** network and proposed a **Scheduling Algorithm for resource allocation** that dynamically decides cellular and D2D communication mode and allocates resources optimally that maximizes the overall throughput of the network. The **SINR** of each cellular and D2D pair with interference in **UL** and **DL** are generated and selected the optimal SINR cellular resource to share with D2D pair.

Technical Expertise

- Language:** Java, Python, C/C++, JavaScript, TypeScript, R
- Frameworks:** Spring [Boot, MVC, Webflow, Security, Data JPA, Batch, Hateoas, GraphQL], Python Flask, Angular, Hibernate, JPA, Mockito
- Web Services:** REST, SOAP
- Middlewares:** WebLogic, WildFly, Tomcat, TomcatEE, Glassfish
- Databases:** MySQL, Oracle, PostgreSQL, In-memory database Redis, Cloud Storage - Minio
- Tools:** Maven, Gradle, Ant, Postman, Git, Bitbucket, Docker
- OS Platforms:** Linux, Windows, Mac
- Big Data:** Kafka, Apache KUDU, Apache Spark, Apache Druid, Elasticsearch

Work Experience

TigerIT Bangladesh Ltd.

Dhaka, Bangladesh

Senior Software Engineer

Oct 2019 - present

- Spearhead and train a team of 4 software engineers to ascertain the successful completion of deliverables of **4 country-scale projects**.
- Perform various **RnD** and provide expert support and guidance on architectural changes in ongoing initiatives taken by the company.
- Designed and developed system which **verifies Rohingya AFIS And AFRS match** before approving new Voter applications.
- Continuously contribute in troubleshooting issues in production deployment and performance tuning.
- Review code for defects and quality against technical documents and standard practices.

Software Engineer

Jan 2016 - Sept 2019

- Extensively re-engineered and re-structured legacy software system to improve the maintainability, scalability and **increased performance by approximately 35%**.
- Core architect of a large-scale data migration project involving a highly complex process with multiple source and target systems that successfully migrated around **120M Demographic and Biometric data** within 52 hours.
- Developed **High volume and low latency Restful APIs** for integrating them to various client applications serving response less than **30ms**.
- Designed and developed **data streaming pipeline** using **Apache kafka** that combine messaging and storage of both historical and real-time data.
- Developed a high performance real-time fast data Analytics application using **Apache Druid, Kudu and kafka**.
- Designed and developed **Report modules** for multiple ongoing projects which involves complex query writing.
- Assisted the Junior Software Engineers to solve technical problems and mentor them in writing high-quality code.

TherapBD Ltd.

Associate Software Engineer

- Worked with Technical Staff to understand problems with software and correct them.
- Developed new features for the **MAR module** of Therap application.
- Wrote a successful migration project which incorporated **ETL process to store lookup standard diagnosis codes (e.g. ICD-9/10)**.
- Solved user reported bugs of different modules in Therap Application.
- Learning and experimenting the usability of various technologies in Therap application.

Dhaka, Bangladesh

Oct 2014 - Dec 2015

TherapBD Ltd.

Junior Software Engineer

- Learning, installing and reviewing various technologies related to software development
- Investigated users reported bugs in the codebase and resolved them.
- Did code refactoring to increase readability and performance in different modules.

Dhaka, Bangladesh

Jan 2013 - Sept 2014

Industrial Projects

Bangladesh NID application System

TigerIT Bangladesh

Technology Stack: [Spring MVC, Spring Security, JSP, Semactic-UI, JQuery]

- An online public portal where citizen of Bangladesh can apply for NID card and voter registration

Rohingya AFIS And AFRS adjudication System

TigerIT Bangladesh

Technology Stack: [Python Flask, Angular.js, Spring Boot, Quartz Scheduler]

- An application which ceaselessly verifies new voter applications with Rohingya AFIS and AFRS database

CMS system for Election Commission Officials

TigerIT Bangladesh

Technology Stack: [Spring Boot, Spring Security, JWT Token, JSP, Bootstrap, vue.js]

- Web Application for bangladesh election commission officials to oversee voter registration and NID card applications

Bangladesh Citizen data Migration Project

TigerIT Bangladesh

Technology Stack: [Spring Boot-Scheduling, JDBC, Apache Kafka, Redis]

- A data migration project to migration 120M voter demographic and biometric data to elasticsearch, Apache KUDU, Redis, Minio and Oracle database.

Nepal HSENP Registration System

TigerIT Bangladesh

Technology Stack: [Spring MVC, Spring Security, JSP, Semactic UI, JQuery]

- A online public portal where Nepal Citizen can apply for high security embossed number plate for their Vehicles.

Nepal Vehicle Number Plate Emboss management System

TigerIT Bangladesh

Technology Stack: [Spring MVC, Spring Security, Thymeleaf, Bootstrap, JQuery, Oracle database]

- A web application for nepal DOTM officials to supervise HSENP printing applications.

Nepal vehicle data migration project

TigerIT Bangladesh

Technology Stack: [Spring-Batch, Spring-Jdbc, Oracle Database]

- A data migration projects to migrate 35M vehicle data to Oracle database.

Bangladesh NTMC National Datahub Project

TigerIT Bangladesh

Technology Stack: [Spring Boot, Spring Security, JWT Token, Apache Kafka, Redis, GraphQL]

- An ETL project for bangladesh NTMC which accumulate Citizen data from multiple sources and make them accessible for

Therap Application

Therap BD Ltd.

Technology Stack: [Spring MVC, JSP, EJB, Hibernate JPA, Oracle Database]

- Developed new feature in Medication Administration Record(MAR) module to record patient administration
- Developed a migration project to store lookup standard ICD-9/10 diagnosis code into relational Database

Academic Projects

Buddy Circle-A Social networking web application

University Of Dhaka

Internet Programming

2012

- An application developed back in 2012 using spring mvc, jsp, html5, jpa, mysql

Tic Tac Toe Game using ATmega32 microcontroller

University Of Dhaka

Computer Peripherals and Interfacing

2010

- A multiplayer tic-tac-toe game written in C language for ATmega32 Controller

Dots and Boxes - Online Multiplayer Game

University Of Dhaka

Object Oriented Programming-JAVA

2010

- An online multiplayer game developed using JAVA Applet and socket programming

Avoid collision Game

University Of Dhaka

Programming Language Fundamental- C Language

2008

- A simple single user game developed using C iGraphics library

Unix Shell

University Of Dhaka

Operating System

2009

- A simple bash like Unix shell which executed linux command using exec()

Competition and Achievements

2011	University Stipend , Shamsunnahar Trust Scholarship	University of Dhaka
2007	Education Board Scholarship , HSC Board Exam	Rajshahi, Bangladesh
2005	Education Board Scholarship , SSC Board Exam	Rajshahi, Bangladesh
2014	Champion , Women Table Tennis Tournament arranged by TherapBD Ltd.	Dhaka, Bangladesh

Interests

Cooking	I love baking and Cooking. I try out new recipes every weekend. Baking my own birthday cake gives me an ultimate joy
Table Tennis	Table Tennis is my most favourite sports among all. I play table tennis with my colleagues everyday at my workplace
Travelling	I am an avid traveler. I travel around in my own country and abroad whenever I find a feasible opportunity.
Music	I enjoy almost all types of music. However, primarily I love screamo, pop, psychedelic, K-Drama OSTs and K-Pop.

Languages

English	Professional proficiency
Bengali	Native proficiency
Hindi	Bilingual proficiency