

NISHAT ANJUM

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About Me

I am a committed Software Engineer with a decade of substantial experience in developing and enhancing enterprise-level software solutions. Presently, I hold the position of Principal Software Engineer at an esteemed IT organization in my home country. My proficiency centers around JAVA, JVM-based technologies, Big Data, Software Design Patterns, and Development Methodologies. After a thorough assessment of my extensive professional background and unwavering career aspirations, I am fully dedicated to pursuing a research-focused Master's Program in Computer Science and its various sub-disciplines. I firmly believe that this academic pursuit will pave the way for me to establish a rewarding career as a Computer and Software Specialist in the future.

Education

University of Dhaka

Dhaka, Bangladesh

BSc. (Honours) in Computer Science and Engineering

March 2008 - April 2012

- **CGPA:** 3.37/4.00
- **Merit Position:** 14th out of 45 students
- **Total Credit:** 148
- **Courses:** Software Engineering, Data Structures and Algorithms, Computer Programming Language, Database Management System, Operating System, Computer Networks, Discrete Mathematics, Theory of Computation, Artificial Intelligence
- **IELTS:** Overall Band Score **7.5 [L-9, R-7.5, W-7, S-6.5]**

Govt. A. H. College

Bogra, Bangladesh

Higher Secondary School Certificate

June 2005 - April 2007

- **GPA:** 5.00/5.00
- **Group:** Science

Research Interests

- Artificial Intelligence and Machine Learning
- Application of Machine Learning in Software Engineering
- Database and knowledge-base systems
- Data Science and Data Analytics
- Software Engineering

Academic Research

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

University Of Dhaka

Supervisor: Professor DR. MD. ABDUR RAZZAQUE

2012

In this work, We addressed the spectrum-sharing problem between **cellular and underlying D2D link**. Our main goal was to maximize the throughput of the underlying 3G cellular network in non-orthogonal Resource-Sharing mode. We proposed a **Scheduled resource-sharing Algorithm** for **eNodeB** that intelligently identified potential D2D connection pairs and optimally shared **UpLink** and **DownLink** resources by calculating **SINR** for each pair.

Technical Expertise

- Language:** Java, Python, C/C++, JavaScript, TypeScript, R
- Frameworks:** Spring-[Boot, Security, MVC, Webflow, Data JPA, Batch, HATEOAS, GraphQL], Python Flask, Angular, Hibernate, JPA, Mockito
- Web Services:** REST, SOAP
- Middleware:** WebLogic, WildFly, Tomcat, TomcatEE, Glassfish
- Databases:** MySQL, Oracle, PostgreSQL, In-memory Data Structure Store-REDIS, Cloud Object 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

Tiger IT Bangladesh Limited.

Dhaka, Bangladesh

Principal Software Engineer

Oct 2022 - present

- Supervising and training a Development team of four software engineers.
- Providing technical guidance to the team and overseeing the technical aspects of four Government projects and upcoming Projects.
- Improving the performance of existing software solutions.
- Investigating Project-related objections and taking necessary measurements to ensure optimal software performance.
- Regularly attend team meetings to discuss projects, brainstorm ideas, and propose solutions to any issues.

Senior Software Engineer

Oct 2019 - Sept 2022

- Supervised a team of four software engineers to ascertain the successful completion of deliverables.
- Performed various RnD and provided expert support and guidance on architectural changes in ongoing initiatives taken by the company.
- Continuously contributed to troubleshooting issues in production deployment and performance tuning.
- Reviewed code for defects and quality against technical documents and standard practices.
- Designing, coding, and debugging new projects

Software Engineer

Dec 2015 - Sept 2019

- Extensively re-engineered legacy software system to improve scalability and **increased performance by approximately 35%.**
- Core architect of a large-scale data migration project involving a highly complex process that successfully migrated approximately **120M Demographic and Biometric data within 42 hours.**
- Developed High volume and low latency Restful APIs for various client applications serving **responses less than 30ms.**
- Developed a 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 involved complex query writing.
- Assisted the Junior Software Engineers in solving technical problems and mentored them in writing high-quality code.

Therap BD Ltd.

Dhaka, Bangladesh

Associate Software Engineer

Oct 2014 - Dec 2015

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

Junior Software Engineer

Aug 2012 - Sept 2014

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

Industrial Projects

Bangladesh NID application System

TigerIT Bangladesh

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

- An online public portal where citizens 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 crosschecks 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 migrate 120M voter demographic and Biometric data to Elasticsearch, Apache KUDU, Redis, Minio and Oracle database.

Nepal HSE-NP Registration System

TigerIT Bangladesh

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

- An online public portal where Nepal Citizens can apply for high security embossed number plates for their Vehicles.

Nepal HSE-NP Application management System

TigerIT Bangladesh

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

- A web application for Nepal DOTM officials to supervise HSE-NP printing requests.

Nepal vehicle data migration project

TigerIT Bangladesh

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

- A data migration project 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 accumulates Citizen data from multiple sources and make them searchable and accessible

Vehicle Tracking System - Bangladesh NTMC

TigerIT Bangladesh

Technology Stack: [Alien JAVA SDK, MQTT, Caffeine Cache, Spring Boot, Spring Scheduling]

- The application unceasingly accumulates vehicle movement information by interfacing with Alien RFID Reader

Therap Application

Therap BD Ltd.

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

- Developed new features in Medication Administration Record(MAR) module to record patients medication record
- 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

Internet Programming

- An application developed back in 2012 using spring mvc, JSP, html5, JPA, MySQL

Tic Tac Toe Game using ATmega32 microcontroller

Computer Peripherals and Interfacing

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

Dots and Boxes - Online Multiplayer Game

Object Oriented Programming-JAVA

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

Avoid collision Game

Programming Language Fundamental- C Language

- A simple single player game developed using C i-Graphics library

Unix Shell

Operating System

- A simple bash like Unix shell which executes Linux commands using exec().

University Of Dhaka

2011

University Of Dhaka

2010

University Of Dhaka

2010

University Of Dhaka

2008

University Of Dhaka

2009

Competition and Achievements

2015	Runner-Up , Women Table Tennis Tournament arranged by Therap BD. Ltd.
2007	Education Board Scholarship , HSC Board Exam
2005	Education Board Scholarship , SSC Board Exam

Dhaka, Bangladesh

Rajshahi, Bangladesh

Rajshahi, Bangladesh

Interests

Table Tennis	Table Tennis is my favorite sport of all. I engage in daily table tennis matches with my colleagues.
Workout	I am passionate about fitness. Some of my favorite activities are western yoga and low-impact aerobics.
Cooking	I love baking and Cooking. Baking my birthday cake gives me ultimate joy. I try out new recipes every weekend.
Traveling	I am an avid traveler. I explore both domestic and international destinations whenever the chance arises.
Music	I enjoy almost all types of music. However, primarily I love Soul, Country, Indi, pop, Psychedelic, OST, and K-Pop.

Languages

English	Professional proficiency
Bengali	Native proficiency
Hindi	Bilingual proficiency