

Abir Hosen

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EDUCATION

Noakhali Science & Technology University

MSc - Information & Communication Engineering (2020-21)

Noakhali, Chittagong

2023

Noakhali Science & Technology University

BSc - Information & Communication Engineering (2014-15)

Noakhali, Chittagong

2019

OBJECTIVE

With 5+ years of experience in full-stack development and AI, I am deeply passionate about leveraging AI and software development to drive innovation. My expertise spans AI-driven applications, with hands-on experience in LLM integration, vector databases and scale-able back-end architectures ensured the release of good interactive application that provides intuitive and secure experience for clients. I have contributed to projects like E-commerce, ERP, Lead-generation, Recruitment Management, Marketing Automation, Music Platform, and Cloud solutions aiming to enhance business efficiency and user experience. Currently, my goal is to pursue a role where I can combine my skills in software development and AI to create impactful solutions, while continuing to grow and contribute to the AI field's advancement.

KEY TECH SKILLS

Exploratory **Data Analysis & Manipulation** (Numpy, Pandas, Matplotlib, Seaborn, Sweetviz), **AI** (Scikit-learn, Tensorflow, Hugging Face), **NLP** (SpaCy, LangChain, RAG, FAISS, MCP), **LLM** (OpenAI, Gemini), **JavaScript** (NestJs, ExpressJS, ReactJs, NextJs, Typescript, Redux, AdminJS, SocketIO), **Java** (Spring Boot, JPA, Maven), **Python** (Fast API), **Database** (Mysql, PostgreSQL, pgVector, MongoDB), **Cloud** (AWS, Render), **Application Management** (Docker), **SSO** (Keycloak), **BaaS** (Firebase, Supabase).

KEY PROJECTS

Probashkormi [↗](#)

Duration 08/2023 to Ongoing

About A recruitment management system for individuals seeking jobs abroad. The platform eliminates middlemen for a direct connection between employers and job seekers.

- liabilities*
- Developed backend with NestJS, Prisma, GraphQL, and MongoDB.
 - Integrated AWS S3 for file storage.
 - Responsible for complete DB design and API pipeline.

SoftCollab [↗](#)

Duration 04/2023 to Ongoing

About A platform for sharing and collaborating on music files between producers and musicians.

- liabilities*
- Upgraded backend using ExpressJS, SocketIO and MySQL.
 - Utilized ffmpeg and ImageMagick for audio processing.
 - Integrated AWS S3 for file management.

Roboket - (A Marketing automation system) [↗](#)

Duration 02/2021 to 03/2023

About Marketing automation software that integrates lead-generation tools with social media and communication platforms.

- liabilities*
- Upgrade backend in microservice architecture using FastAPI.
 - Worked with Keycloak for SSO and Docker for project virtualization.
 - Managed frontend components using ReactJS and Redux.

Tiger ERP

Duration 01/2020 to 01/2021

About Tiger ERP is an enterprise resource planning (ERP) solution designed to manage various business operations like inventory, sales, procurement, and accounting. It aims to streamline business processes, reduce inefficiencies, and enhance reporting.

- liabilities*
- Developed both backend and frontend with Spring Boot and AngularJS.
 - Designed database schema and created custom queries.
 - Developed secure authentication and API pipeline using JWT.

FEATURED PROJECTS

Jamahook – AI Music Generator Module [↗](#)

Duration 05/2025 to Present

About AI-powered music production enhancement feature enabling solo instrumental generation using **Stable Audio** open models, to integrate into Jamahook's real-time DAW assistant system.

- liabilities*
- Designed & developed Stable Audio-based solo music generation feature service.
 - Analyzed platform requirements and constraints to choose optimal deployment architecture and runtime environment.

Chat Brokers

Duration 03/2025 to 05/2025

About AI and LLM-powered broker info chat system using RAG and MCP enabled dynamic context-aware conversations with comparison, recommendations, and insights.

- liabilities*
- Data ingestion and structuring pipeline for diverse broker profiles to ensure consistency.
 - RAG and the MCP toolset enabling intelligent comparison, recommendation and user support.
 - End-to-end system architecture, data modeling, context management.

Cannella Recruitment Service (AI)

Duration 02/2025 to 04/2025

About An AI-powered job platform that streamlines the hiring process by intelligently matching job requirements with applicant CVs, ensuring the best fit for both employers and candidates.

- liabilities*
- Developed AI models to analyze and match job requirements with applicant CVs.
 - Implemented machine learning algorithms for candidate-job ranking.
 - Optimized the system for accurate and efficient job matching.

Query AI

Duration 10/2024 to 01/2025

About A cutting-edge NLP-based solution that generates and executes SQL queries from user prompts. It bridges the gap between user intent and data insights.

- liabilities*
- Developed FastAPI backend for the project.
 - Designed and optimized PostgreSQL and pgVector for storage.
 - Responsible for complete database design.

MashAllah Ecommerce

Duration 02/2024 to 11/2024

About A scalable e-commerce platform built with microservices and microfrontend architecture. It features modules for e-commerce, inventory management, order processing, and admin controls.

- liabilities*
- Developed Spring Boot microservices and Next.js microfrontend architecture.
 - Designed and implemented PostgreSQL database schema.
 - Utilized Docker for project virtualization.

Singistic [↗](#)

Duration 03/2023 to 08/2023

About An online karaoke app for Web, Android, and iOS users, with a wide range of songs in multiple languages.

- liabilities*
- Developed backend with NestJS and DynamoDB.
 - Implemented audio processing using ffmpeg, Spleeter, and ImageMagick.
 - Managed file storage with AWS S3.

Cloud Infra

Duration 05/2021 to 07/2022

About Cloud Infra is a cloud server management platform designed to streamline the management of web servers for business owners. It offers automated backups, server monitoring, and deployment tools for easy cloud management.

- liabilities*
- Developed frontend using ReactJS, Redux, and Axios.
 - Worked with Docker for project virtualization.
 - Integrated Keycloak for SSO.

EXPERIENCE

Embedded Logic Operation(ELO)

Dhaka, BD

Software Engineer (Full Stack Developer)

March 2023 – Present

- I'm responsible for developing optimizing and extending existing and new software.
- Produce clean, efficient code based on specifications.
- Verify and deploy programs and systems.
- Ensure fast render and fresh bug free code.
- Maintain Agile Scrum in development life cycle.

ADN Diginet

Dhaka, BD

Software Engineer (Full Stack Developer)

February 2021 – March 2023

- I'm responsible for optimizing and extending existing software.
- Ensure fast render and fresh bug free code
- Maintain Agile Scrum in development life cycle.

Tiger ERP

Dhaka, BD

Java Developer (Full Stack Developer)

January 2020 – January 2021

- Requirement analysis and develop project.
- Actively take part in database design, project planning & extending.
- Test, analyze, debug software
- Maintain Agile Scrum in development life cycle.

LAST BUT NOT LEAST

- Problem solving in [hacker rank](#).
- Write content on [medium](#).
- [Kaggle](#) contributor.
- Associated with a theater group named [Driesshokabbo](#) at the Bangladesh Shilpakala Academy.
- Organizer of a film society (Zero Definition) in university and and train member for video production & motion graphics. Links: [youtube](#), [facebook](#).