MUSTAKIM BILLAH RAFI

Backend and System Design Enthusiast

✉ rafisharkar144@gmail.com | 🔗 /in/rafi-sharkar/ | 🌐 Portfolio | 📞 01905493909

SUMMARY

Full-Stack Developer with proper knowledge **in Backend Development, Database Management, and System Design**. Proficient in building **scalable, high-performance applications** using modern frameworks like **Next.js and NestJS**. Currently **pursuing** a BSc in Computer Science and Engineering, focusing on high-availability architecture and exploring AI-driven software systems.

TECHNICAL SKILLS

Languages	JavaScript, Java, Python, SQL, HTML, CSS
Frameworks	Next.js, NestJS
Databases	PostgreSQL, MySQL, MongoDB
Tools & Other	Git, System Design, Data Structures & Algorithms, MS Office Suite

SELECTED PROJECTS

Rent On (Real Estate Rental Solution)

Key tech: React.js, Express.js, MongoDB, Tailwind, JWT   *11/2024 – 12/2024*
Source Code

- Developed a full-stack rental platform featuring **intuitive property search, tenant management**, and secure payment processing.

Poultry Supply Chain Management System

Key tech: Next.js, Nest.js, PostgreSQL, JWT, Prisma   *08/2025 – 10/2025*
Source Code

- Designed and developed a web application to **streamline end-to-end poultry business operations**.
- Enabled efficient tracking of farm stock, orders, collections, and deliveries, resulting in optimized supply chain visibility.

Core Concepts of Operating Systems Implementation

Key tech: C++, Java   *09/2025*
Source Code

- Implemented solutions for core OS concepts, including **Multithreading, CPU Scheduling algorithms (e.g., FCFS, SJF, Round Robin), and Synchronization techniques**.
- Addressed and provided solutions for common concurrency problems such as **Deadlock and Starvation**.

KEY ACHIEVEMENTS

- **Performance Optimization:** Improved code efficiency for a Line Following Robot (LFR), resulting in a **30% reduction in loading times**.
- **Team Leadership & Research:** Led a team of 4 to design a **Supply Chain Management System Tailored for Agribusinesses** and **published** associated paper.
- **Supply Chain Prototype:** Designed a functional prototype at **HackNSU Season 5** to enhance efficiency within the Ready-Made Garment (RMG) supply chain.

EDUCATION

BSc in Computer Science and Engineering
Independent University Bangladesh, Dhaka, Bangladesh
September 2021 – Expected Dec 2025

PUBLICATIONS

- **Supply Chain Management System Tailored for Agribusinesses- 2024: Engineered a comprehensive system design** (ERD/Relational Schema) to eliminate intermediaries and streamline farm-to-vendor transactions, enhancing transparency and market access.

Training & Certifications

- **Introduction to Networks– 2024,CISCO:** Validating hands-on skill in **configuring L2/L3 devices**, implementing IPv4/IPv6 addressing, and securing small-scale networks.