

# Md Shariful Islam Khan

+8801701750255 • [sharifulislam.si689@gmail.com](mailto:sharifulislam.si689@gmail.com) • [LinkedIn](#) • [GitHub](#) • [LeetCode](#) • Dhaka, Bangladesh

## Education

**Bangladesh University of Engineering and Technology (BUET)**  
B.Sc. in Computer Science and Engineering; **CGPA: 3.77/4.00**

Dhaka, Bangladesh  
Feb 2020 – Feb 2025

**Notre Dame College (NDC)**  
Higher Secondary Certificate, Science; **GPA: 5.00/5.00**

Dhaka, Bangladesh  
June 2017 – May 2019

## Skills

<b>Languages:</b>	C, C++, Java, Python, JavaScript, Assembly, Bash
<b>Frameworks &amp; Libraries:</b>	Next.js, React, Node.js, Express.js, PyTorch, TensorFlow, scikit-learn
<b>Database:</b>	Oracle, PostgreSQL, MySQL, Prisma ORM, SQLite
<b>Tools:</b>	Git, GitHub, Docker, Postman, Insomnia
<b>Cloud:</b>	Amazon EC2, Azure VM, Azure App Service, Vercel, CI/CD Pipelines

## Projects

**Mathmaster** | *Express, Node.js, PostgreSQL, Prisma ORM, Tailwind CSS, React, Mafs.js* [GitHub](#)

- Developed an interactive math learning platform with modules for students, authors, moderators, and administrators, supporting features like course enrollment, content creation, and feedback workflows.
- Designed and implemented a **scalable database** schema following **MVC architecture** principles, enabling efficient data management and maintainable codebase. Designed and deployed a centralized file system in Azure VM to efficiently manage variable-length content such as lessons and dictionaries
- Built and optimized **RESTful APIs** to facilitate interaction between client and server. Implemented a robust **role-based authentication system** using JWT to manage access for various user roles securely.

**Criccbuzz** | *OracleDB, Express, EJS, Node.js, Bootstrap* [GitHub](#)

- **Developed a dynamic cricket information platform** as part of an academic database sessional course, leveraging OracleDB.
- Implemented features enabling users to view live cricket scores, match/player statistics, schedules, and results in a responsive interface.
- **Built the frontend** using EJS and Bootstrap to create an engaging user experience while integrating with **Express** and **Node.js** for backend functionality.

**C Compiler** | *Yacc, Flex, Bison, 8086 Emulator* [GitHub](#)

- Developed a subset C compiler supporting lexical analysis, semantic analysis, and intermediate 8086 code generation with peephole optimization.
- Implemented core functionalities, including type casting, scope management, control statements, recursion, and functions with parameters and return values.
- Designed a symbol table for identifier management, verbose error detection, and support for basic data types (int, float, double, char) and comments.

**Football Transfer Market** | *JavaFX, Java*

- Developed a client-server application simulating a football transfer market, enabling clients to buy and sell players through a centralized database.
- Using Java multithreading and networking features to handle concurrent client interactions and ensure seamless communication between the server and multiple clients.
- Designed an intuitive graphical user interface (GUI) using JavaFX for a user-friendly client-side experience.

**Machine Learning Lab Assignments** | *Seaborn, OpenCV, Pickle, Torchvision* [GitHub](#)

- Developed a Logistic Regression ensemble system with bagging, stacking, modular preprocessing, and comparative analysis of voting and stacking.
- Built a Feed-Forward Neural Network (FNN) from scratch for apparel classification, incorporating Batch Normalization, ReLU, Dropout, and Adam optimization.
- Implemented PCA and visualized data with scatter plots, UMAP, t-SNE; applied the EM algorithm for Poisson mixture estimation.