

# SAROWAR ALAM MINHAJ

✉ +880 1874 116935 | 📩 sarwar76200@gmail.com | 💬 sarwar76200 | 💽 sarwar76200 | 🌐 Portfolio | 🗺 Dhaka, Bangladesh

## EDUCATION

### North South University

Bachelor of Science in Computer Science; GPA: 3.11 / 4.00

Dhaka, Bangladesh

June 2020 – July 2025

- **Relevant Coursework:** Data Structures & Algorithms, OOP, Operating Systems, DBMS, Theory of Computation, Deep Learning, Software Engineering, Computer Architecture

### Udayan Higher Secondary School

Higher Secondary Certificate; GPA: 4.75 / 5.00

Dhaka, Bangladesh

March 2017 – May 2019

## COMPETITIVE PROGRAMMING

### NSU Problem Solvers

Sport Programmer

June 2020 – July 2025

North South University

- Qualified for the **2023 ICPC Asia West Continent Final**
- Four-time participant in the **ICPC Dhaka Regional Contest** (2021–2024).
- Became **1st Runner-Up** out of 100 contestants in Intra-NSU Programming Contest 2023.
- Took part in various Inter University Programming Contests.
- Contributed as a judge and problem setter at Intra-NSU Junior Programming Contest 2023.
- Organized programming contests and DSA bootcamps for junior students.
- Solved around 2000 problems on different online judges. Codeforces: sarwar\_\_ (Max Rating 1527). ↗

## TECHNICAL SKILLS

**Languages:** C/C++, Java, Python, JavaScript, TypeScript

**Frontend:** React, Redux, TailwindCSS, Vite

**Backend:** Node.js, Express, Flask, FastAPI

**Databases:** MySQL, MongoDB, Redis, Firebase

**AI/ML:** PyTorch, pandas, NumPy

**Tools:** Git, REST APIs, WebSockets, Jest, Playwright, Bash

## PROJECTS

### ExamEase | Automated Exam Proctoring & Evaluation System

Code

- Developed a full-stack online exam platform supporting MCQs, descriptive answers, and AI-assisted micro-viva
- Implemented face-based auto-proctoring to detect suspicious behavior during exams
- Integrated NLP models (BERT) to assist automated grading of descriptive answers
- Built voice-based micro-viva using OpenAI Whisper for speech-to-text evaluation
- Designed a responsive and user-friendly interface for real exam simulations
- Tech: React, TailwindCSS, Node.js, Express, MongoDB, Flask, BERT, Whisper

### PWS | Prescription Generation and Management

Code

- Built a web-based system to manage medical prescriptions, appointments, and patient records
- Implemented real-time medicine search and automated prescription storage
- Integrated SMS notifications for appointment confirmations
- Tech: PHP, MySQL (MariaDB), Bootstrap, jQuery, AJAX, Vanilla JavaScript

### EVM-STM32 | Electronic Voting Machine (EVM) for STM32 μController

Code

- Designed a secure electronic voting system using STM32 microcontroller
- Implemented election logic using Nondeterministic Finite Automata (NFA)
- Interfaced 16x2 LCD display and 4x4 matrix keypad for user interaction
- Tech: STM32 (Blue Pill), Embedded C Programming, Finite Automata