

TANVIR HASAN ABIR

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[LinkedIn](#) · [GitHub](#)

EDUCATION

Bachelor of Science in Software Engineering (Expected: December 2025)
Institute of Information Technology (IIT)

University of Dhaka

Higher Secondary School Certificate (2018 - 2020)

Govt. Science College - Dhaka

GPA: 5.00/5.00

SKILLS

- **Programming Language:** C, C++, Java, JavaScript, Python, SQL
- **Competitive Programming:** [Pupil](#) at [Codeforces](#) (max ratings: 1200+)
- Successfully solved **450+** problems on platforms including [Codeforces](#), [CodeChef](#), [HackerEarth](#), [LeetCode](#), and [GeeksforGeeks](#), enhancing skills in algorithms and data structures.
- **Web Development:** MERN Stack (MongoDB, Express.js, React, Node.js), Django, Docker
- **Version Control:** Git, GitHub
- **Others:** UI/UX Design (Figma)

PROJECTS

PACExplorer ([GitHub Link](#))

NASA Space Apps Challenge 2024

- Built an interactive web app using **React Vite, Tailwind CSS**, and **MongoDB Atlas** to visualize NASA's PACE satellite data.
- Simplified complex climate and ocean ecosystem data for educational use, promoting environmental awareness among students.

IIT Routine & Lab Management System ([GitHub Link](#))

Academic Project for SPL-II, February 2024 – May 2024

- Developed a resource optimization system using **MERN Stack (MongoDB, Express, React, Node.js)** to manage classrooms, labs, and schedules at the University of Dhaka's IIT.
- Improved facility utilization and reduced scheduling conflicts.

EcoSync ([GitHub Link](#))

Code Samurai 2024

- Developed a waste management web application using **MERN Stack (MongoDB, Express, React, Node.js)** for Dhaka North City Corporation.
- Delivered the project within 8 days, enhancing urban sustainability and operational efficiency.

Project CoolCity ([DevPost Link](#))

AI for Change Hackathon – Winner, June 2024 (48-hour hackathon)

- Collaborated with a team to build an AI-powered solution using **MERN Stack (MongoDB, Express, React, Node.js)** to mitigate rising urban temperatures caused by climate change.
- Developed innovative features under a 48-hour deadline, securing a winner category position.

Derivative Calculator ([GitHub Link](#))

Academic Project for SPL-I, January 2023 – May 2023

- Built a mathematical tool using C++ that parses expressions and applies differentiation rules to calculate derivatives efficiently.

WORK EXPERIENCE

ORGANIZING SECRETARY

[IIT SOFTWARE ENGINEERS' COMMUNITY \(IITSEC\)](#), JUNE 2024 – PRESENT

- Led a team to organize tech events, workshops, and hackathons for 200+ students.
- Promoted collaboration between students and professionals in the tech industry.

ADDITIONAL INFORMATION

- Participated in the ITverse UI/UX Competition hosted by IITSEC. [\[Prototype Link\]](#)
- **ICPC Participation:** Participated in ICPC Asia Dhaka Regional Preliminary round twice.
- **Languages:** Fluent in Bengali, English, and Hindi.
- **Hobbies:** Enjoy playing cricket and football and watching movies.