

# MD ABUL ALA MOUDUDI | Under-Graduate School Student

Temporary: Niribili, Savar, Dhaka - 1344

Permanent: Billah, Chalkvarunia, Joypurhat Sadar, Joypurhat - 5900

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## About

A highly motivated fourth-year CSE student with strong proficiency in C, Java, Python, and advanced expertise in modern web technologies including React, TypeScript, JavaScript, Next.js, and Node.js. Skilled in building scalable, efficient and user-centric web applications supported by HTML, CSS, and MySQL-backed architectures. Passionate about innovative research in Blockchain, Machine Learning, and Artificial Intelligence, with strong analytical and problem-solving abilities. Dedicated to contributing effectively to cutting-edge, web-driven and AI-powered projects through a blend of technical depth, research capability and practical development experience.

## Research Experience

**Published Paper:** Comparative Analysis Based on DeepSeek, ChatGPT, and Google Gemini: Features, Techniques, Performance, Future Prospects [🔗](#)

**Submitted Paper:** LSTM-Integrated Model for Sentiment Analysis Combining BoW, TF-IDF Features, and Performance Analysis of Conventional Machine Learning Models

**Ongoing Research:** Brain Tumor Detection in MRI Images using advanced Machine Learning techniques.

Developing an optimized machine learning model aimed at enhancing diagnostic accuracy in brain tumor detection

## Research Interest

- AI • ML • DL • Cyber Security • Blockchain • Cloud Computing • Health Care and Robotic Management in Health Care

## Education

### B.Sc in Computer Science & Engineering (CSE)

Feb 2022 – Running

Institute: National Institute of Textile Engineering & Research (NITER)

University: University of Dhaka | Dhaka, Bangladesh

• CGPA: 3.62/4.0

• Coursework: Computer Architecture, Comparison of Learning Algorithms, Computational Theory, Fundamental Programming & OOPs, DBMS, Networking & Operating Systems, AI & Machine Learning and Software Designing

### Higher Secondary in Science

Aug 2018 - Jan 2021

Mohipur Hazi Mohshin Govt. College | Joypurhat, Rajshahi, Bangladesh

### Secondary in Science

Jan 2016 - June 2018

Joypurhat Siddikia Kamil Model Madrasha | Joypurhat, Rajshahi, Bangladesh

## Academic Projects

### • Talenttown Software (A DBMS & Web Application Software Project)

Developed a robust DBMS and Web Application using MySQL for backend management and Python integrated with Selenium for automated testing scripts

### • Police Record Management System (A DBMS project storing and retrieving data in Database)

Designed and implemented a database system using MySQL for secure record management, with Python for backend processing and Java for a user-friendly interface

### • Arduino-based Sensor Projects for Automation and Detection Systems

Distance measurement using Ultrasonic Sensor HC-SR04 and serial monitor, controlling LED by clapping using Sound Sensor KY-038, automatic light control using Ultrasonic Sensor HC-SR04 and buzzer, automatic door alarm using Ultrasonic Sensor HC-SR04 and buzzer, darkness detection using LDR, gas leak detection and alarm using MQ2 Sensor and Arduino, human movement detection using PIR Motion Sensor and Arduino, obstacle avoidance using IR Sensor.

### • Petuk (Smart Food Recipe App)

Developed an Android application using Java in Android Studio, featuring advanced recipe management and search functionalities for seamless user experience

- **Smart Irrigation and Water Management System**

Developed an IoT-based system using ESP-32 and Arduino UNO to automate plant watering and water pump control, ensuring efficient water usage through real-time soil moisture and water level detection.

## Web-Based Projects

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- **Research Ustad (A Full-Stack Web Development Project)**

Developed a comprehensive full-stack web platform for research collaboration using **Next.js (React Framework)** with **TypeScript** for frontend, and **Node.js, Express.js, and MongoDB** for backend development. [Visit Research Ustad](#)

- **Sabilillah Foundation Website (Full-Stack Islamic Web Platform)**

Built a full-stack charity donation website using **Next.js** with integrated backend features, ensuring optimized performance, responsive design, and SEO enhancement. [Visit Sabilillah Website](#)

- **Research Ustad Joining Page (Modern, Responsive and Dynamic Application Page)**

Developed a modern, responsive, and dynamic joining application page for Research Ustad using Next.js, featuring seamless user interaction, optimized performance, and an integrated backend for real-time data handling. [Visit Joining Page](#)

- **Personal Portfolio (Advanced Frontend Development)**

Designed and developed a personal portfolio website using **React Framework NextJS, Tailwind CSS**, showcasing projects, skills, and professional achievements with modern UI/UX principles. [View Portfolio](#)

- **Personal Portfolio (Advanced Frontend Development)**

Designed and developed a personal portfolio website using **advanced HTML, CSS, and JavaScript** for the CEO of Research Ustad and Thethe, the PhD researcher in the Dept. of Applied Computing at Georgia Southern University, USA. [View Portfolio](#)

## Work Experience

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### Assistant Science Teacher (Part-Time), Hazi Jan Mohammad High School

Jun 2025 - Running

An educational institution committed to nurturing scientific curiosity through quality teaching, hands-on experiments, and academic guidance

Web: [Hazi Jan Mohammad High School](#) | Email: [info@hazijanmohammadhs.edu.bd](mailto:info@hazijanmohammadhs.edu.bd)

#### Key Responsibilities:

- Conduct engaging science classes following the national curriculum with practical demonstrations and experiments.
- Assist in preparing lesson plans, assessment materials, and student progress reports in coordination with the academic team.
- Encourage scientific thinking among students through extracurricular activities such as science fairs, Olympiads, and group projects.

### Executive Director & Moderator , Research Ustad

Dec 2024 - Running

An academic platform supporting research students through writing, publishing, and tool guidance

Web: [Research Ustad](#) | Email: [info@researchustad.org](mailto:info@researchustad.org)

#### Responsibilities:

- Managed and collaborated with all research teams to ensure comprehensive support in writing, publishing, and research tools.
- Conducted workshops and courses to mentor students in higher studies preparation and research methodologies
- Managed the organization's social media presence, ensuring effective engagement and outreach to target audiences.

**Head of IT & Co-Founder, Warishaan Apparels Limited**  
Ashulia, Savar, Dhaka, Bangladesh

Aug 2024 - Jun 2025

A garments manufacturing company specializing in sustainable and high-quality apparel production for export markets

Web: [warishaan apparels limited](http://warishaan apparels limited) | Email: [director@warishaanapparels.com](mailto:director@warishaanapparels.com)

**Responsibilities:**

- Directed comprehensive IT operations, ensuring secure network protocols, efficient data management, and seamless software system integration to streamline business functions.
- Ensured network security and seamless operation of software systems while integrating advanced technologies for business growth.
- Supervised IT team operations, troubleshooting technical issues, and coordinating with other departments to achieve organizational objectives.

**Field Supervisor (TAP Application) , Mutual Trust Bank (MTB)**  
Joypurhat, Rajshahi ,Bangladesh

May 2021 - Sep 2021

**Responsibilities:**

- Team Management:** Supervised and coordinated a team of 100 individuals, ensuring efficient workflow, task delegation, and adherence to organizational goals.
- Operational Oversight:** Ensured smooth execution of the TAP application process, overseeing daily operations, and resolving any challenges or issues arising in the field.
- Guidance and Training:** Provided guidance and on-the-job training to team members, ensuring that they were well equipped to meet performance standards and comply with banking protocols.

## Co-Curricular Activities

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**Invigilator - SSC Exam 2025**

April 2025 - Running

- The SSC (Secondary School Certificate) exam in Bangladesh is a public exam administered by the government, specifically by the Boards of Intermediate and Secondary Education (BISE). It's a crucial exam for students completing their 10th grade (Secondary School Certificate) and is the equivalent of O-Levels in the UK.

**Assistant Exam Controller - The Student Welfare Association Savar**

Jan 2023 - Running

- Conducting 02 yearly scholarship exam where more than 4 thousand student's attendees every year.

**Campus Ambassador - ICT Olympiad Bangladesh, Season 2**

Aug 2024 - Running

- Bangladesh's premier and most impactful annual ICT Olympiad, bringing together students in a celebration of innovation and excellence

**Organizing Secretary - NITER Computer Club (NCC)**

2024 - 25 Session

- Fosters innovation and hands-on learning in Computer Science and Engineering through workshops, competitions, and collaborative projects.

**General Member - NITER Islamic Society (NIS)**

2022 - Running

- Organized events fostering spiritual growth and community outreach, including workshops, discussions, and charity drives, enhancing campus engagement.

**District Admin Manager - ICT Olympiad Bangladesh , Season 1**

Apr 2022 - Nov 2023

- Bangladesh's premier and most impactful annual ICT Olympiad, bringing together students in a celebration of innovation and excellence

**Private Tutor**

Jun 2019 – Present

- Providing personalized home tuition to students from Grade 4 to Grade 12.
- Subjects include Science, Physics, Chemistry, ICT, General & Higher Mathematics and English.
- Focused on conceptual understanding, exam preparation, and academic improvement.

## Skills

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- Problem-Solving • Creative Thinking • Leadership Quality • Adaptability • Strong Communication

## Technical Skills

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- **Programming Languages:** C, Java, Python, CLI commands, Bash Scripts & LaTeX
- **Web Development:** React, NextJS, NodeJS, ExpressJS, MongoDB, React, HTML, CSS
- **Database Management:** MySQL, MongoDB
- **Version Control:** Git, GitHub
- **Development Tools:** Visual Studio, Eclipse, IntelliJ IDEA, NetBeans, PyCharm, Android Studio ,Jupyter Notebook, Google Colab
- **Cloud & Virtualization:** Oracle VM, VMware, Microsoft SQL Server, XAMPP
- **Office Tools:** MS Word, MS PowerPoint, MS Excel, MS Power BI, Google Workspace
- **Other Skills:** Data Structures, Algorithms, Problem-Solving

## Linguistic Proficiency

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- English (Fluent); IELTS Band Score: • Bangla (Native) • German (Beginner Level)

## Awards & Prize

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- **2<sup>nd</sup> Position:** Open Book Quiz Contest, Organized by the NITER Islamic Society 2024
- **Best Volunteer Award:** The Student Welfare Association Savar 2024
- **1<sup>st</sup> Position:** Associate Intellectual Test, Organized by BICS 2023
- **1<sup>st</sup> Position:** Islamic Quiz Contest, Organized by NITER Islamic Society 2023
- **1<sup>st</sup> Position:** Associate Intellectual Test, Organized by BICS 2022
- **DU Full Funded Scholarship:** For Private Constituent Institutions of the University of Dhaka, covering all academic tuition fees, excluding the form fill-up fees for each semester. 2022

## Workshop & Seminar

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- **WRITING RESEARCH ARTICLES AND PUBLICATIONS WORKSHOP**  
Conduct by Research and Integrated Thought Ltd. (RIT)
- **WEB APPLICATION DEVELOPMENT WORKSHOP**  
Conduct by Mr. Md Sahal, Associate Software Engineer Brain Station 23 PLC
- **Web and Software Development Seminar**  
Conduct by ANISUL ISLAM, Full Stack Trainer and Software Engineer
- **Basic IOT and Robotics Workshop**  
Conduct by Bangladesh Flying Labs

## Reference

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### Anichur Rahamn

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### Dipanjali Kundu

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