





Mubasshir Ahmed

Software Engineer | Researcher

 Mubasshir Ahmed |  mubasshir00 |  Mubasshir Ahmed |  mubasshir00

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ACADEMIC EXPERIENCE

- **Institute for Advanced Research (IAR) Lab, United International University** Jan 2024 - Sept 2025
Research Assistant Dhaka, Bangladesh
 - Developing privacy-preserving mechanisms using cryptography and blockchain to secure sensitive healthcare and health insurance data.
 - Implementing machine learning models while ensuring data privacy and compliance with industry regulations.

PROFESSIONAL EXPERIENCE

- **Engineering Resources International (ERI) Ltd, Dhaka** Feb 2023 - July 2025
Software Engineer Dhaka, Bangladesh
 - Lead backend development team of Resources Tracking Information System (**RTIS**), a platform which is used by over 90 factories and multiple clothing brands across Bangladesh, Pakistan, India, Denmark, USA, Ireland, China.
 - Lead a subteam to deliver the Employee Management System from the ground up, driving the team to deliver on time, while maintaining clean, modular, and well-documented code.
- **Ethics Advance Technology Limited** Sept 2023 - August 2024
Lab Instructor Dhaka, Bangladesh
 - Instructed the “Cybersecurity Essentials for IT Professionals in Banks and Financial Institutions” program is offered by Innovate College of Business and Technology, Canada
- **Gaming Hub (Game Streaming Platform)** 2022 Dec - July 2024
Co-Founder and CTO Dhaka, Bangladesh
- **Apprise IT, Dhaka** Feb 2022 - Jan 2023
Junior Software Engineer Dhaka, Bangladesh
 - Developed backend API and updated features, as well as did unit test and integration test for **Hive Live** and **Poco Live** and developed a management tool for the admin panel using NodeJS, ExpressJS, React, and MongoDB.
- **Vision Mash** Dec 2021 - April 2022
Software Engineer (Part-time) Dhaka, Bangladesh
 - Worked as a contractual Front End Developer, responsible for developing UI using HTML, CSS, and Bootstrap, and developed UI as a client requirement.
- **BDEMR Solutions. Corp.** Sept 2020 - Jan 2022
Junior Software Engineer Remote
 - Worked as a full-stack developer, developed ERP software UI using ReactJS for hospitals, and fixed backend-related issues.

EDUCATION

- **Victoria University , Sydney, Australia**
Master of Applied Information Technology (Enrollment Year : 2025)
- **North South University ,Dhaka, Bangladesh**
Bachelor of Science in Computer Science and Engineering (Passing Year - 2023)
Thesis - **Storage and Maintenance of Sensitive Data using Homomorphic Encryption**
 - CGPA: 2.63/4.00 (79%)

- [J.1] Mazharul Islam, **Mubasshir Ahmed**, Rajesh Palit, Mohammad Shahriar Rahman, and Salekul Islam, **Fraud Detection in Privacy Preserving Health Insurance System using Blockchain Technology**, Accepted in *Engineering Reports*, Wiley, 2025.
- [C.3] Mazharul Islam, **Mubasshir Ahmed**, Shakib Hossain, Niaz Ashraf Khan, **A Blockchain-based Medical Record Storage System for Healthcare Data Management**, Accepted in *International Conference on Advances in Communication Technology and Computer Engineering* Nov 2024.
- [C.2] Mazharul Islam, **Mubasshir Ahmed**, and Niaz Ashraf Khan, **Fault Detection and Diagnostics of Air Handling Unit in Hospital Building Using Machine Learning**, Accepted and Presented in *15th International Conference on Computing Communication and Networking Technologies (ICCCNT)*, Mandi, India, Jul 2024.
- [C.1] Mazharul Islam, **Mubasshir Ahmed**, and Rajesh Palit, **Storage and Maintenance of Sensitive Data using Homomorphic Encryption**, In *16th International Conference on Security of Information and Networks (SIN)*, Jaipur, India, 2023 Nov 20, pp. 1-6, doi: 10.1109/SIN60469.2023.10474775.
- [B.1] Hasib, Kazi Tamzid Akhter Md, Rakibul Hasan, **Mubasshir Ahmed**, and AKM Bahalul Haque. **Blockchain Based Smart Card for Smart City**, In *Enabling Technologies for Effective Planning and Management in Sustainable Smart Cities*. Springer, doi: 10.1007/978-3-031-22922-0_7

SKILLS

- **Programming Languages** : JavaScript, HTML5, CSS3, C++ ,Python
- **Web Frameworks** : ExpressJS , NestJS , NodeJS , ReactJS
- **Database Systems** : PostgreSQL,MongoDB,Redis , MySQL
- **Testing** : Jest, Mocha, Chai,Postman
- **Cloud Technologies** : AWS (EC2, S3, SQS, SNS, VPC etc),Contabo
- **DevOps & Version Control** : Docker, Git
- **Miscellaneous**: Academic Research, Machine Learning, NLP , Cyber Security , Cryptography , Blockchain

ADDITIONAL SKILLS

- **Language Proficiency** : IELTS 6.5 (CEFR: B2) - Reading: 7.0, Writing: 6.5, Speaking: 6.0, Listening: 6.0

HONORS AND AWARDS

- **Winner & Global Nominee**, *NASA Space Apps Challenge 2023* 🌐
- Participant, *KIBO Robot Programming Challenges*
- **2nd Runner-Up**, *NASA Space Apps Challenge 2022* 🌐
- **1st Runner-Up**, *HackNSU Season 4*
- **SEANM Finalist**, *Microsoft Imagine Cup* 🌐
- **1st Runners-Up**, *NASA Space Apps Challenge* 🌐

VOLUNTEER EXPERIENCE

- **NSU_Inception** (March 2019 - Dec 2023)
Trainer & Participant Dhaka , Bangladesh

RESEARCH INTEREST

Cyber Security, Data Security and Privacy, Modern Cryptography, Programming Languages, Software Engineering, Cloud Computing, Database, Internet of Things (IoT) and Machine Learning

REFERENCES

- **Dr. Rajesh Palit**
Professor and Ex-Chairman, Department of Electrical & Computer Engineering, North South University
Email: rajesh.palit@northsouth.edu
Relationship: Thesis Supervisor & Supervisor at Institute for Advanced Research (IAR) Lab
- **Dr. Salekul Islam**
Professor, Department of Electrical & Computer Engineering, North South University
Email: salekul.islam@northsouth.edu
Relationship: Supervisor at Institute for Advanced Research (IAR) Lab