

📍 Rangamati, Bangladesh

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M. AKTARUZZAMAN OPU

B.Sc. (Engg.) in Computer Science & Engineering (RMSTU)

EDUCATION

February 2022 –
August 2026

Bachelor of Science (Engineering) in Computer Science and Engineering

Department of Computer Science and Engineering, Rangamati Science and Technology University (RMSTU), Rangamati, Bangladesh.

CGPA: **3.96** on the scale of 4.00 | Merit Standing: **Ranked 1st**

- Secured **1st Position** in 7 semesters (1st, 2nd, 3rd, 4th, 5th, 6th, and 8th Semesters).
- Achieved a **Perfect GPA of 4.00 / 4.00** in 3 consecutive terms (2nd - 4th Semesters).

2020

Higher Secondary Certificate (HSC), Science Group

Lakers' Public School and College, Rangamati, Chattogram Board

GPA: **5.00** on the scale of 5.00

2018

Secondary School Certificate (SSC), Science Group

Lakers' Public School and College, Rangamati, Chattogram Board

GPA: **5.00** on the scale of 5.00

UNDERGRADUATE THESIS

November 2025 –
August 2026

Undergraduate Thesis Project (In Progress / Pre-Publication)

Thesis Title: *Zero-Label Cell Microscopy: Anomaly Detection Using Vision Transformers and DINOv2.*

Supervisor: Assistant Professor, Md. Mynoddin, Department of Computer Science and Engineering, Rangamati Science and Technology University.

PUBLICATIONS

1. **A Comparative Study of Multi-Criteria Decision-Making Methods for Selecting Sustainable Energy Projects in Rangamati, Bangladesh**

Authors: Ishtiaq Uddin, **M. Aktaruzzaman Opu**, Shahidul Islam, Tanjim Mahmud, Md Akash Rahman, et al.

Published: In *Proceedings of the 2026 International Conference on Power, Electronics, Communications, Computing, and Intelligent Infrastructure (PECCII)*, Pabna, Bangladesh: IEEE, 2026, pp. 1–6.

DOI: [10.1109/PECCII70991.2026.11661914](https://doi.org/10.1109/PECCII70991.2026.11661914) | **IEEE Xplore:** ieeexplore.ieee.org/document/11661914/

RESEARCH INTERESTS

My research interests lie at the intersection of **Deep Learning**, **Computer Vision**, and **Decision Systems**. I focus on **Self-Supervised Learning**, **Vision Transformers (ViTs)**, and **zero-label/unsupervised anomaly localization** in high-resolution biomedical datasets. In parallel, I am interested in **Multi-Criteria Decision Making (MCDM)**, distributed systems architecture, and database optimization for high-reliability systems engineering.

TEACHING EXPERIENCE

November 2024 –
March 2025

Higher Mathematics Instructor

Rangamati Govt. Women's College, Rangamati, Bangladesh.

- Taught Higher Mathematics to higher secondary students.
- Covered Calculus, Coordinate Geometry, Matrices, and Trigonometry.
- Prepared assessments and guided students in problem-solving.

TEACHING INTERESTS

Programming Fundamentals, Object-Oriented Programming, Data Structures and Algorithms, Database Management Systems, Software Engineering, Machine Learning, and Computer Vision. Interested in developing students' problem-solving, algorithmic thinking, and practical software development skills.

AWARDS AND SCHOLARSHIPS

2025

UGC Merit Scholarship 2025

Awarded by the University Grants Commission (UGC) of Bangladesh for outstanding undergraduate academic excellence.

CERTIFICATIONS

April 2026

Information Technology Engineers Examination (ITEE) – FE Exam

Status: Full Passer (Level-2)

Fundamental Information Technology Engineer (FE) Examination administered by the Bangladesh Information Technology Examination Committee (BD-ITEC) under the Information-technology Promotion Agency (IPA), Japan.

COMPETITIVE PROGRAMMING & MATHEMATICS OLYMPIAD

2025

Regionalist / Contestant, ICPC Asia Dhaka Regional Contest Final 2025

International Collegiate Programming Contest (ICPC), hosted by Bangladesh University of Business and Technology (BUBT).

2025

Top 10 Finalist, 16th National Undergraduate Mathematics Olympiad (NUMO 2025)

Chattogram Regional Round, organized by the Bangladesh Mathematical Society.

2025

5th Place, CoU CSE Fest 2025, Inter University Programming Contest (Divisional)

2025

Contestant, IIUC CSE Fest 2025 – Inter University Programming Contest (Divisional)

2024

Regionalist / Contestant, ICPC Asia Dhaka Regional Contest Final 2024

International Collegiate Programming Contest (ICPC), hosted by Daffodil International University (DIU).

2023

Top 10 Finalist, 14th National Undergraduate Mathematics Olympiad (NUMO 2023)

Chattogram Regional Round, organized by the Bangladesh Mathematical Society.

2024

Contestant, CUET IUPC 2024 – Inter University Programming Contest 2024

TECHNICAL SKILLS

Programming Languages: C, C++, Python, Java, JavaScript, TypeScript

Machine Learning & CV: PyTorch, Torchvision, OpenCV, Scikit-learn, NumPy, Pandas, Matplotlib, Deep Learning, Computer Vision, Model Evaluation, Transfer Learning

Data Structures & Algorithms: Data Structures, Algorithms, Problem Solving, Competitive Programming

Web & Systems Development: Next.js, React.js, Node.js, Express.js, Hono, REST APIs, Tailwind CSS, Mongoose ORM

Databases & Security: MongoDB, PostgreSQL, MySQL, Firebase, Database Administration (DBA), Role-Based Access Control (RBAC)

Simulation & Tools: Git/GitHub, VS Code, Linux/macOS CLI, Canva, GHDL, GTKWave, Digital Simulator, OpenGL, FreeGLUT, Docker

Typesetting & Publishing: $\LaTeX$, Xe $\LaTeX$, Beamer, Bib $\TeX$, Markdown, Microsoft Office Suite

PROJECTS

2026 –
Present

Teach Easy | teacheasy.com.bd

Role: System Architect, Full-Stack Developer, DBA & Security Analyst

Tech Stack: Next.js, React.js, Node.js, MongoDB, Tailwind CSS

- Architected and deployed a production e-commerce and educational platform.
- Designed scalable database schemas, query optimization, role-based access control (RBAC), and secure authentication.
- Implemented security audits, input sanitization, and vulnerability protection.

2025

ICBC Conference Management System — ICBC 2025, RMSTU | icbc.rmstu-conf.ac.bd

Role: Full-Stack Developer, Database Administrator & Security Analyst (Team Project)

Tech Stack: Next.js, Tailwind CSS, React.js, Node.js, MongoDB

- Developed the central conference management system for ICBC 2025.
- Managed submission and reviewer data with reliable database transactions.
- Implemented endpoint security, HTTPS, and secure credential handling.

REFERENCES

Md. Mynoddin

Assistant Professor

Department of Computer Science and Engineering

Rangamati Science and Technology University

Rangamati-4500, Bangladesh

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(Undergraduate Thesis Supervisor)

Md. Mynoddin

Assistant Professor

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(Undergraduate Thesis Supervisor)