



Md. Anamul Hossain Chowdhury

Date of birth: 10/02/2000 | **Nationality:** Bangladeshi | **Gender:** Male | **Phone number:**

(+880) 01830163986 (Mobile) | **Email address:** anamul.sust.ce52@gmail.com | **Website:**

<https://www.univbd.com/team/md-anamul-hossain-chowdhury/> | **LinkedIn:**

<https://www.linkedin.com/in/anamul-hossain-chowdhury/> | **ResearchGate:**

https://www.researchgate.net/profile/Md-Anamul-Chowdhury-3?ev=hdr_xprf | **ORCID iD:**

<https://orcid.org/my-orcid?orcid=0009-0009-3337-0706> | **Google Scholar:**

<https://scholar.google.com/citations?user=-ySd3McAAAAJ&hl=en> |

Address: Choto Targoan, Palash, Narsingdi, 1610, Dhaka, Bangladesh (Home)

ABOUT ME

I recently completed my B.Sc. in Civil Engineering and have developed a strong passion for environmental research. My research focuses on groundwater pollution, flood management, and sustainable water resource management, with a particular emphasis on addressing the impacts of climate change on water systems and developing adaptive strategies to enhance environmental resilience.

WORK EXPERIENCE

 **SYLHET ENGINEERING COLLEGE** – SYLHET, BANGLADESH

Website <https://sec.ac.bd/>

TEACHING ASSISTANT – 09/08/2025 – CURRENT

- Assisted faculty in conducting lectures and tutorial sessions
- Provided guidance and support to students during laboratory classes
- Evaluated assignments, quizzes, and exams with accurate grading
- Prepared and organized course materials and lab resources

 **UNIV** – CALLE MARGARITA XIRGÚ, 10 50018 ZARAGOZA, SPAIN

Website <https://www.univbd.com/>

ASSISTANT DIRECTOR – 06/03/2025 – CURRENT

- Oversee ongoing research projects and coordinate development initiatives
- Analyze data and prepare technical and progress reports
- Support innovation-driven activities and research collaborations
- Contribute to planning and evaluation of research outcomes

 **SYLHET AGRICULTURAL UNIVERSITY** – SYLHET, BANGLADESH

Website <https://www.sau.ac.bd/>

UNIVERSITY RESEARCH ASSISTANT – 03/03/2024 – CURRENT

- Conducted experiments and collected data on water quality and environmental parameters
- Applied machine learning and statistical tools for data analysis and prediction

- Prepared maps and visualizations using GIS and Origin Pro
- Assisted in writing research papers, reports, and conference submissions

● **EDUCATION AND TRAINING**

09/02/2020 – 06/06/2025 Sylhet, Bangladesh
B.SC. (ENGINEERING) IN CIVIL ENGINEERING Shahjalal University of Science & Technology

- Surveying, Calculus, Mechanics, Statistics, Construction, Programming, Remote Sensing & GIS
- Structural & Geotechnical Engineering, Fluid & Open Channel Flow, Transportation Engineering
- Hydraulics, Environmental Engineering and Earthquake Engineering
- Project Management, River Engineering, Prestressed Concrete Design

Website <https://www.sust.edu/> | **Final grade** 3.77 out of 4.00 (With Distinction) | **Level in EQF** EQF level 6 |

Number of credits 162 |

Thesis Predictive Multiple Machine Learning Models of Riverine Water Pollution Index: A Comprehensive Data-Driven Study

11/08/2024 – 01/02/2025
RESEARCH INTERNSHIP UniV

- Gained hands-on experience in environmental data analysis and modeling
- Participated in fieldwork and laboratory testing for research projects
- Assisted in preparing visualizations, presentations, and summaries of research results

Website <https://www.univbd.com/>

● **LANGUAGE SKILLS**

Mother tongue(s): **BENGALI**
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	B2	C1	C1	B2	C1
HINDI	B2	C1	B2	B2	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

● **SKILLS**

Programming languages: C++, Python | Machine learning | GIS | origin pro | IBM SPSS - IBM Analytics | ETABS | AutoCAD | MD SOLIDS | Microsoft Office (Microsoft)

● **CONFERENCES AND SEMINARS**

15/11/2024 Chittagong
Path to Prosperity: Expert Guide to Building a Successful Career

- Career Planning: Strategies for setting goals and creating a road-map to success
- Skill Development: Identifying and enhancing key skills for professional growth
- Networking Tactics: Building meaningful connections to expand career opportunities

Link <https://www.univbd.com/>

15/08/2024 New York, USA
International Youth Conference

- Global Perspectives: Insights into international issues and solutions from diverse cultures
- Leadership Development: Skills for inspiring change and leading initiatives
- Networking Opportunities: Building connections with global youth leaders and experts

Link <https://iycforyouth.org/>

- Learned advanced search techniques to efficiently find relevant research articles
- Explored tools and filters in IEEE Xplore for precise literature retrieval
- Gained strategies to organize, access, and utilize research resources effectively

Link <https://innovate.ieee.org/free-webinars-from-ieee/>

- Current challenges and strategies in flood management in Bangladesh
- Research methods for assessing flood impacts and mitigation measures
- Future directions and policy considerations for sustainable flood management

Link <https://www.buet.ac.bd/web/>

- Learned the fundamentals of conducting academic research and structuring a study
- Gained insights into writing, formatting, and submitting research papers for publication
- Understood the peer-review process and best practices for scholarly publishing

Link <https://www.univbd.com/>

● **PUBLICATIONS**

Write here the description...

Sarker, M. A. R., Chowdhury, M. A. H., Haque, M. T., et al. (2025). From Data to Decision: Leveraging Machine Learning and Water Quality Index for Groundwater Quality Evaluation.

Journal Name: Sustainable Water Resources Management | **Publisher:** Springer

Ferdos, J., Mitu, E. K., Chowdhury, M. A. H., et al. (2025). Flood-Induced Damage Assessment and Adaptation Strategies in Riverine Communities of Kanaighat Upazila, Bangladesh. (Under Review)

Journal Name: Development Policy Review | **Publisher:** Wiley

Chowdhury, M. A. H., et al. (2025). A Retrospective Analysis of Flood Risk Management in Bangladesh. (Under Review).

Journal Name: International Journal of Integrated Engineering | **Publisher:** Penerbit UTHM

Chowdhury, M. A. H., et al. (2025). "Evaluating Industrial Impact on Surface Water Quality in Dhaka and Sylhet Rivers, Bangladesh: A Machine Learning Approach," in Proc. 28th IEEE ICCIT, Cox's Bazar, Bangladesh, Dec. 19–21, 2025. (Under Review).

Journal Name: 28th International Conference on Computer and Information Technology | **Publisher:** IEEE

2025

Machine Learning Approaches to Classify and Predict Water Quality Status in the Surma River, Sylhet, Bangladesh

Chowdhury, M. A. H., et al. (2025). "Machine Learning Approaches to Classify and Predict Water Quality Status in the Surma River, Sylhet, Bangladesh," in Proc. 28th IEEE ICCIT, Cox's Bazar, Bangladesh, Dec. 19–21, 2025. (Under Review)

Journal Name: 28th International Conference on Computer and Information Technology | **Publisher:** IEEE

2025

A Comparative Study on Air Quality Status Prediction Using Machine Learning Models: A Case Study of Industrial and Non-Industrial Zones in Bangladesh

Chowdhury, M. A. H., et al. (2025). Comparative Study on Air Quality Prediction Using Machine Learning in Industrial and Non-Industrial Zones, Bangladesh. Proc. 28th IEEE ICCIT, Cox's Bazar, Bangladesh. (Under Review)

Journal Name: 28th International Conference on Computer and Information Technology | **Publisher:** IEEE

2025

Machine Learning-Based Flood Hazard Classification Using Climate Parameters with Threshold-Based Early Warning for Flood Risk Management in Bangladesh

Chowdhury, M. A. H., et al. (2025). Machine Learning-Based Flood Hazard Classification and Early Warning for Flood Risk Management, Bangladesh. Proc. 28th IEEE ICCIT, Cox's Bazar, Bangladesh. (Under review).

Journal Name: 28th International Conference on Computer and Information Technology | **Publisher:** IEEE

2025

Meta-learning Model for Low-Data River Water Quality Analysis, Northeastern Bangladesh

Chowdhury, M. A. H., et al. (2025). Meta-learning Model for Low-Data River Water Quality Analysis in Northeastern Bangladesh. 16th IEEE ICCNT, IIT Indore, India, July 6–11, 2025.

Journal Name: 16th International IEEE Conference on Computing, Communication, and Networking Technologies | **Publisher:** IEEE

2025

Comparative Study of ML Models for PM10 Prediction in Major Bangladeshi Cities

Chowdhury, M. A. H., et al. (2025). Comparative Study of ML Models for PM10 Prediction in Bangladeshi Cities. 16th IEEE ICCNT, IIT Indore, India.

Journal Name: 16th International IEEE Conference on Computing, Communication, and Networking Technologies | **Publisher:** IEEE

2025

ML-Based Air Quality Forecasting in Urban-Industrial Zones of Bangladesh

Chowdhury, M. A. H., et al. (2025). ML-Based Air Quality Forecasting in Urban-Industrial Zones, Bangladesh. 16th IEEE ICCNT, IIT Indore, India.

Journal Name: 16th International IEEE Conference on Computing, Communication, and Networking Technologies | **Publisher:** IEEE

2025

Deep Learning-Based Assessment and Prediction of Organic Pollution Index, Dhaka Lakes

Mutalib, M. A., et al. (2025). Deep Learning-Based Assessment and Prediction of Organic Pollution Index, Dhaka Lakes. 16th IEEE ICCNT, IIT Indore, India.

Journal Name: 16th International IEEE Conference on Computing, Communication, and Networking Technologies | **Publisher:** IEEE

2025

Flood Management in Bangladesh: A Review of Current Impacts, Challenges and Future Directions

Sarker, M. A. R., et al. (2025). Flood Management in Bangladesh: Current Impacts, Challenges, and Future Directions. 10th ICWFM, CIRDAP, Dhaka, Bangladesh.

Journal Name: 10th International Conference on Water and Flood Management

2024

Impact of Dhaka Metro Rail on Travel Behaviour

Hassan, M., Mehjabin, F., Nafees, A. A., Paul, A., Chowdhury, M. A. H., et al. (2024). Impact of Dhaka Metro Rail on Travel Behavior. 13th APTE, NUS, Singapore, July 8–10, 2024.

Journal Name: 13th Asia-Pacific Conference on Transportation and the Environment

2025

Predictive Multiple Machine Learning Models of Riverine Water Pollution Index: A Comprehensive Data-Driven Study

Chowdhury, M. A. H., et al. (2025). Predictive Multiple Machine Learning Models of Riverine Water Pollution Index: A Comprehensive Data-Driven Study.

Journal Name: undergraduate thesis | **Publisher:** Sylhet Engineering College

● **CERTIFICATIONS**

Great Learning, 01/04/2024

Project Management

- Learned key project management principles, methodologies, and lifecycle processes
- Gained skills in planning, scheduling, and resource allocation for projects
- Developed abilities in risk management, team coordination, and project monitoring

Mode of learning: Online

Link <https://www.mygreatlearning.com/academy/learn-for-free/courses/project-management>

Simplilearn, 08/09/2024

Machine Learning

- Learned core machine learning concepts, algorithms, and techniques
- Gained hands-on experience with data preprocessing, modeling, and evaluation
- Applied machine learning methods for prediction, classification, and analysis of datasets

Mode of learning: Online

Link <https://www.simplilearn.com/>

DisasterReady, 08/10/2024

Security Risk Management

- Learned fundamental principles of identifying and assessing security risks
- Gained skills in developing strategies to mitigate and manage security threats
- Understood best practices for implementing security measures in organizational settings

Mode of learning: Online

Link <https://ready.csod.com/client/disasterready/default3.aspx?lang=en-US>

Asian Development Bank Institute, 06/10/2024

Infrastructure Operations and Maintenance

- Learned best practices for the operation and maintenance of civil and urban infrastructure
- Gained skills in monitoring, inspection, and performance assessment of infrastructure systems
- Explored strategies to enhance efficiency, durability, and sustainability of infrastructure assets

Mode of learning: Online

Link <https://elearning-adbi.org/courses/infrastructure-operations-and-maintenance/>

Climate Change and Sovereign Risk

- Understood the impacts of climate change on national economies and public finances
- Learned to assess sovereign risk in the context of environmental and climate-related challenges
- Explored strategies for climate risk mitigation and adaptation at the policy level

Mode of learning: Online

Link <https://elearning-adbi.org/courses/climate-change-sovereign-risk/>

DisasterReady, 23/10/2024

Becoming a Great Leader

- Learned key leadership principles and effective team management techniques
- Developed skills in communication, decision-making, and conflict resolution
- Explored strategies to motivate and guide teams toward achieving goals

Mode of learning: Online

Link <https://ready.csod.com/client/disasterready/default3.aspx?lang=en-US>

United Nations University, 04/06/2025

Satellite Data Analysis Using Cloud Computing for Surface Water/Flood Mapping

- Accessed, processed, and analyzed satellite imagery using cloud computing platforms
- Applied techniques to map and monitor surface water and flood-affected areas
- Integrated remote sensing data with GIS for environmental and disaster assessment

Mode of learning: Online

Link <https://lc.unu.edu/>

Google, 14/08/2024

Google Analytics

- Tracking and interpreting website traffic and user behaviour
- Measuring key metrics to evaluate and improve digital performance
- Creating actionable reports to inform marketing and business strategies

Mode of learning: Online

Link <https://skillshop.credential.net/issuer/89126/credentials>

The Nature Conservancy, 16/08/2024

Wastewater Pollution

- Gained insights into the causes and consequences of wastewater pollution on ecosystems and human health.
- Learned innovative treatment methods and strategies for reducing pollution and improving water quality
- Explored the role of policies, regulations, and community involvement in mitigating wastewater pollution effectively

Mode of learning: Online

Link <https://www.conservationtraining.org/>

Columbia University offered through Coursera, 07/07/2024

Construction Project Management

- Efficient scheduling, budgeting, and resource allocation for construction projects
- Identifying, assessing, and mitigating risks in construction processes
- Managing teams and stakeholders to ensure project success

Mode of learning: Online

Link <https://coursera.org/verify/PL27P5RF1S7I>

Basic RCC Structural Design

- Practical understanding of RCC principles for building structures
- Creating and analyzing building models using ETABS
- Applying ETABS to evaluate load distribution and ensure structural safety

Mode of learning: Project based

Link <http://ddslearn.com/>

● HONOURS AND AWARDS

11/05/2024

1st Runner-up – Truss Trekker – Dhaka University of Engineering and Technology

- Demonstrating strong structural engineering and problem-solving skills
- Participated in the Quake Quest competition, showcasing strategic thinking and teamwork
- Gained hands-on experience in applying engineering concepts in competitive, real-world scenarios

Link <https://ascechapter.duet.ac.bd/civilization>

04/05/2024

Champion, (Game of Trusses) – Islamic University of Technology

- Led my team to victory as champions in the Game of Trusses at Cennovation 2024, IUT, competing against nearly 95 teams from over 20 universities
- Demonstrated strong problem-solving skills and expertise in structural Engineering
- Applied theoretical knowledge effectively in a competitive, high-stakes environment

Link <https://cennovation.org/>

07/10/2024

Merit-Based Scholarship – Sylhet Engineering College

- Received merit-based scholarships in every semester at Sylhet Engineering College for ranking among the top 30 students based on CGPA
- Recognized for consistent academic excellence and outstanding performance throughout the degree program
- Demonstrated strong dedication to maintaining high academic standards and achieving excellence

Link <https://sec.ac.bd/>

● NETWORKS AND MEMBERSHIPS

02/10/2025 – 05/11/2025 International Journal of Environment and Climate Change

Journal Reviewer

- Recognized for contributing to the peer-review process and maintaining publication quality
- Evaluated research manuscripts for technical accuracy, clarity, and originality
- Supported the advancement of scholarly research through constructive feedback

Link <https://journalijecc.com/index.php/IJECC>

15/05/2025 – 14/08/2025 Bangladesh Environment Olympiad

Exam Coordinator

- Coordinated and supervised examination activities at regional and national levels
- Managed question preparation, scheduling, and evaluation processes
- Ensured fair conduct and smooth execution of the competition

Link <https://www.linkedin.com/company/bangladesh-environment-olympiad/posts/?feedView=all>

Scholarship and Higher Study Secretary

- Guided students on scholarship opportunities and higher study programs
- Organized seminars and information sessions on academic and research prospects
- Assisted in coordinating activities that promoted academic growth within the society

Link <https://www.linkedin.com/company/sec-civilsociety/posts/?feedView=all>

05/03/2025  is an inter-university competition

Event Organizer

- Organized and managed event logistics, coordination, and participant communication
- Collaborated with team members to ensure smooth execution of all competition segments
- Contributed to promoting the event and enhancing inter-university engagement

12/03/2024 – 09/06/2025 International Leadership Competition

Campus Ambassador

- Promoted the competition within the campus and encouraged student participation
- Acted as a liaison between the organizing committee and university participants
- Assisted in organizing promotional activities and sharing event updates

Link <https://ilc.ysditrust.com/>

13/02/2024 – 09/05/2025 Ict Olympiad

Campus Ambassador

- Promoted the ICT Olympiad on campus and motivated students to participate
- Coordinated registration, communication, and event-related activities
- Represented the institution in collaboration with the organizing committee

Link <https://www.ictolympiadbangladesh.com/>

13/04/2024 – 12/02/2025 English Olympiad

Campus Ambassador

- Promoted the English Olympiad across the campus and encouraged student participation
- Coordinated registration, communication, and event management activities
- Represented the institution and maintained liaison with the organizing team

Link <https://www.englisholympiad.net/>

02/04/2024 – 03/08/2025 Sylhet Engineering College (CE Centre of Research)

Organizing Secretary

- Coordinated research-related events, workshops, and academic activities
- Managed communication between student researchers and faculty advisors
- Assisted in organizing seminars and promoting a culture of research within the department

Link <https://sec.ac.bd/>

● VOLUNTEERING

02/11/2024 Bangladesh Youth Leadership Center

volunteer

- Assisted in organizing youth development and leadership programs
- Supported event coordination and participant engagement activities
- Contributed to promoting leadership, teamwork, and social responsibility among youth

Link <https://bylc.org/>

● RECOMMENDATIONS

Dr. Md Abdur Rashid Sarker, Associate Professor Dept. of Agricultural Construction and Environmental Engineering, Sylhet Agricultural University

"I have known Anamul since the first year of his undergraduate program in 2020. He has consistently demonstrated a strong desire to learn, actively seeks creative solutions to challenging tasks, and shows exceptional problem-solving abilities. He worked under me as a Research Assistant and contributed significantly to ongoing projects, and I also served as his thesis co-supervisor. His dedication, persistence, and research skills truly set him apart. I wholeheartedly recommend him as a candidate for a master's program. If you require further information, please feel free to contact me."

Email rashidsarker.acee@sau.ac.bd | **Phone** (+880) 1721261536

Sibbir Ahmed, Assistant Professor & Head Department of Civil Engineering, Sylhet Engineering College, Sylhet

"I've known Anamul for more than four years as an undergraduate student. He consistently excelled in academics, graduating with distinction and achieving top marks in his core courses. He also worked under me as a Teaching Assistant and I served as his thesis supervisor, where he demonstrated strong research and analytical skills. I wholeheartedly endorse him for the master's program. For any further information, feel free to contact me."

Email sibbir.ahmed@sec.ac.bd | **Phone** (+880) 1735635271

Md. Fahad Jubayer, Assistant Professor Department of Food Engineering and Technology, Sylhet Agricultural University, Sylhet

"I have known Anamul since the third year of his undergraduate studies. Since then, he has worked with me on several research projects, including one published in a Springer journal, which was a collaborative project with an Australian professor, and others currently under review. He has also presented our collaborative research at both international and national conferences. Throughout our work together, Anamul has demonstrated excellent research skills, dedication, and the ability to contribute effectively to academic work. I strongly recommend him for the master's program. For any further information, please feel free to contact me."

Email jubayer.fet@sau.ac.bd | **Phone** (+880) 1876529642