

Niloy Ahsan

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EDUCATION

Master of Science in Computer Science and Engineering <i>BRAC University; Data Science Specialization</i>	Oct. 2025 – Present
	<i>Dhaka, Bangladesh</i>
Bachelor of Science in Computer Science and Engineering <i>BRAC University; CGPA: 3.72/4.00</i>	Feb. 2021 – Feb. 2025
	<i>Dhaka, Bangladesh</i>

TEACHING EXPERIENCE

Undergraduate Teaching Assistant <i>CSE Department, BRAC University</i>	Oct. 2023 – Jan. 2025
• Course Taken: Programming Language Java (CSE110) & Electronic Devices and Circuits (CSE251)	<i>Dhaka, Bangladesh</i>
• Provided consultation 15 hours/week, assisted students in labs and graded assignment copies.	
<i>MNS Department, BRAC University</i>	<i>Dhaka, Bangladesh</i>
• Course Taken: Linear Algebra & Fourier Analysis (MAT216).	
• Provided consultation 15 hours/week, assisted students in theory and graded assignment copies.	

EXTRA-CURRICULAR ACTIVITY

Senior Executive at IT & Marketing Department <i>BRAC University Communication and Language Club (BUCLC)</i>	Mar. 2024 – Jul. 2025
• Managed IT infrastructure and digital promotion strategies for all major club events and campaigns.	<i>Dhaka, Bangladesh</i>
• Collaborated with executive teams to streamline event marketing through social media, email and oncampus outreach.	
Volunteering Experiences <i>Various Events, BRAC University</i>	2023 – 2025
• BRAC University's 16 th Convocation 	<i>Dhaka, Bangladesh</i>
• Speakathon – State-level public speaking competition (BUCLC) 	
• International Conference on “Language Metamorphosis” (BRAC Institute of Languages) 	

PROJECTS

BRACU Research Hub <i>Laravel, MySQL, PHP, HTML, CSS, JS</i> Link	Apr. 2025 – Present
• Developed a platform to help students find and join faculty research projects.	
• Used Laravel MVC framework with MySQL for backend data management.	
• Implemented search and filter features for research topics and faculty profiles.	
Heart Disease Prediction System <i>Scikit-learn, Numpy, Pandas, Matplotlib</i> Link	May 2025 – Jul. 2025
• Built ML classifiers to assess heart disease risk from clinical data.	
• Conducted exploratory data analysis and optimized model performance.	
Diabetes Prediction System <i>Scikit-learn, Numpy, Pandas, Matplotlib</i> Link	Apr. 2024 – May 2024
• Implemented ML models to predict diabetes risk using patient health data.	
• Performed data pre-processing and visualization to enhance model accuracy.	
Healthy Habits Diet Planner <i>Laravel, MySQL, PHP, HTML, CSS, JS</i> Link	Feb. 2024 – May 2024
• Built a diet planning web app using Laravel with MVC architecture.	
• Enabled users to track, manage and log daily meals and nutrition goals.	
• Used MySQL for data storage and implemented user authentication.	
2D Ball Runner Game <i>Python, OpenGL</i> Link	Nov. 2023 – Dec. 2023
• Developed a 2D arcade game focused on avoiding falling obstacles and collecting power-ups to increase score.	
• Used Python OpenGL for rendering game graphics and handling user input.	
Study Help Resource Hub <i>HTML, CSS, JavaScript</i> Link	Aug. 2023
• Developed a static website offering all course materials for BRAC University students.	
• Organized resources by course and semester to assist juniors in their academic preparation.	

TECHNICAL SKILLS

Languages: Python, Java, C, PHP, SQL, JavaScript, HTML, CSS

Frameworks: Laravel, React, Node.js, Bootstrap, WordPress

Developer Tools: LaTex, Git, MySQL, Xampp, VS Code, Figma

Libraries: Scikit-learn, Pandas, NumPy, Matplotlib

Platforms & OS: Linux, Arduino, Raspberry Pi

Soft Skills: Time Management, Leadership, Communication, Team Collaboration

RESEARCH WORK

Quantum-Enhanced Tax Revenue via A-Challan: ML, LLMs, and QML Approaches | Accepted Dec. 25
Fields: Quantum ML, Tax Technology

Adaptive SDN Load Balancing with Machine Learning and Time-Domain Round Robin (TDRR) Scheduling | Preprint 2023 – 2025
Field: SDN, Network Optimization, Machine Learning

Poster Presentation on Enhancing Hybrid Network Efficiency: An SDN-Based Approach to Load Balancing and Performance Evaluation at 11th NSysS 2024 | Poster Dec. 2024
Field: SDN, Network Optimization

Data Searching On Cloud Storage: A Comparative Analysis Nov. 2023
Field: Cloud Computing / Cloud Storage Systems

CERTIFICATES

Intermediate SQL – DataCamp	2025
<i>Certificate ID: 2d084fabe0c29e0fe235dfad498575db2e270f91</i>	<i>Online</i>
Introduction to Git – DataCamp	2025
<i>Certificate ID: 48ce91465e926b496c074f004eb66f4234933ba</i>	<i>Online</i>
Understanding Artificial Intelligence – DataCamp	2025
<i>Certificate ID: 324df1ee24faa9707763aa6930fe887216c885a1</i>	<i>Online</i>
SQA Career Launchpad for Absolute Beginners – Ostad	2025
<i>Certificate ID: C31889</i>	<i>Online</i>
Certified Online UX-UI Designer Course – Bdcalling Academy	2024
<i>Certificate ID: bdCV&C#161</i>	<i>Online</i>

HONORS & AWARDS

BSc High Distinction — BRAC University (CGPA: 3.72/4.00)

Dean's List & Vice Chancellor's List — BRAC University (7 semesters)

Merit-based Scholarship — BRAC University (2 semesters)

REFERENCES

1. Dr. Jannatun Noor Mukta

Associate Professor, Dept. of CSE
Director, Data Science Program
United International University
Email: jannatun@cse.uiu.ac.bd
Relationship: Thesis Supervisor

2. Mr. Mohammad Rafiqul Islam

Assistant Professor, Chinese Language
BRAC Institute of Languages (BIL)
BRAC University
Email: rafiqul.islam@bracu.ac.bd
Relationship: Course Instructor