## Recommendation for Ayesha Binte Mostofa

I am writing this letter of recommendation for my student, Ayesha Binte Mostofa, who is applying to your esteemed institution for graduate studies. I have had the pleasure of witnessing Ayesha's growth as her project supervisor, the instructor for four of her courses, and lastly, as a member of the board for her thesis defense. Based on my experiences with Ayesha, I can confidently say that she is a highly driven individual who consistently strives for both personal and professional growth.

I first interacted with Ayesha during the Object-Oriented Programming Language course and its lab in 2020, during her Level 1, Term 2. It was a challenging time, as the pandemic disrupted regular academic activities, but Ayesha showed remarkable dedication and also managed online recordings to help her peers stay connected and engaged in the learning process. Although the term was marked as ungraded due to the COVID-19 pandemic, her lab work received an A+ mark, even though it was officially recorded as "Satisfactory." In this lab, she completed a term project - a car showroom application with a graphical user interface, effectively integrating OOP concepts. In 2021, I had the opportunity to teach Ayesha again in the Database course and its corresponding lab during her Level 2, Term 2. She excelled in both the theory and sessional work, earning well-deserved A grades in both.

I supervised her during the database term project, where Ayesha and her teammates developed Epathshala, an educational platform inspired by Coursera. This was her first major term project, requiring her to learn and apply full-stack development with an Oracle database. Initially, Ayesha and her team presented the project scope. Afterward, with her teammates, she designed an ERD diagram for the project and presented a detailed front-end prototype based on my suggestions. She and her teammates successfully developed all the essential features for the educational platform. Ayesha made significant contributions to this project, particularly by single-handedly developing the front end using Bootstrap and JavaScript. She also contributed to the backend of the Student, Teacher, and Admin modules and implemented Spring Security to ensure user privacy. For backend development, she used complex queries to retrieve data from the database.

In 2024, I was on her thesis defense board, due to my affiliation with the BUET CSE NLP group. She presented an interdisciplinary project with her team mates, on Software Engineering and Natural Language Processing, focusing on automating code review activities using Large Language Models. They integrated Call Graphs and Code Summaries into the dataset to provide a gist of the overall code to guide the LLM for the task. Ayesha and her team delivered an excellent presentation, effectively communicating their research findings in English. I found their research work very innovative, and their communication skills were excellent.

As she comes from one of the cadet colleges, I can confidently attest to Ayesha's ability as a quick learner and adaptable individual, given our shared background from cadet college. Cadet

colleges are renowned for their rigorous and challenging environment, and BUET, the top university in Bangladesh, admits only the brightest students from across the country, particularly in the highly competitive CSE department. Ayesha's accomplishments, including receiving the Dean's List award in both her junior and senior years at BUET, as well as placing in the top 5 in the HSC and top 10 in the SSC exams under the education board, demonstrate her exceptional ability to excel in any situation. Additionally, she participated in technical competitions like the Inter-University Machine Learning competition, where her teams became finalists. She was also active in club activities and was affiliated with the IEEE Computer Society BUET Student Branch Chapter for two years, where she helped organize competitions, career talks, research seminars and software development workshops.

Immediately after completing her graduation, Ayesha joined the Department of Computer Science at the Canadian University of Bangladesh as a lecturer, where I am confident she has demonstrated exceptional teaching abilities. Overall, I find Ayesha to be an outstanding candidate with a cooperative mindset. I wholeheartedly recommend Ayesha for admission to the program of her choice at your esteemed university.

Dr. Rifat Shahriyar,
Professor,
Dept. of Computer Science & Engineering,
Bangladesh University of Engineering & Technology,
Dhaka-1000, Bangladesh