TEACHING STATEMENT

Teaching has always been a source of joy and fulfillment for me. From early on, I recognized my passion for simplifying complex ideas and making them accessible to others. This natural inclination toward teaching led me to pursue a formal teaching career after graduating from Bangladesh University of Engineering and Technology (BUET).

I joined the Department of Computer Science at United International University (UIU) as a full-time lecturer, where I realized early on that clarity in explanation, while essential, is only the beginning of what defines an effective educator. I learned that effective teaching requires both a well-defined personal teaching style and a structured approach to guide student through their learning journey. For instance, in my "Electric Circuits" class during 2014-2015, I began each session by clearly outlining the learning outcomes on the whiteboard. This practice not only helped students mentally prepare but also gave them a clear understanding of what they should aim to achieve by the end of the class.

Another key lesson was the importance of pacing lectures to accommodate different learning speeds, ensuring that the majority of students could follow along. At the same time, I found that asking probing questions during lectures fosters critical thinking and active engagement. In my "Data Structures" course, for instance, I often asked students to apply the newly introduced concepts to real-world problem scenarios. This approach encouraged them to think critically about the material and engage more deeply with the content. To further incentivize participation, I introduced class participation marks for students who could justify their use of specific data structures in different problem contexts. Beyond the classroom, I provided additional support through regular consultation sessions. During these sessions, I tailored my approach based on individual needs—assigning more challenging tasks to motivated students while guiding others with prerequisite exercises to help them stay on track. This personalized attention ensured that students at varying levels of ability could progress and stay engaged with the material.

My role as a graduate tutor in the Graduate Assistantship Programme (GAP) at the National University of Singapore (NUS) was instrumental in refining my teaching philosophy. The rigorous and student-centered teaching culture at NUS pushed me to continuously improve my own pedagogical techniques. Observing and learning from the university's outstanding faculty, I enhanced my communication skills, including body language and eye contact, and I made a habit of repeating key concepts to reinforce understanding. These improvements were reflected in my steadily increasing tutor ratings. **At NUS, I had the opportunity to tutor both undergraduate and graduate courses from the School of Computing and NUS Business School, further broadening my teaching repertoire.**

The Teaching Assistant Programme at NUS, organized by the Centre for Development of Teaching & Learning (CDTL), was particularly transformative. It deepened my understanding of active and collaborative learning strategies. Inspired by this experience, I incorporated micro-discussion sessions in my "Data Management & Warehousing" (BT5110) course, allowing students to work in small groups to troubleshoot problems and learn from one another. This collaborative approach not only enhanced peer learning but also improved students' problem-solving abilities.

The culmination of these experiences has shaped my core teaching philosophy: a dynamic, student-centered approach based on mutual interaction. Whether teaching undergraduate introductory courses like "Programming Methodology" (CS1010) and "Discrete Structures" (CS1231), or advanced graduate courses such as "Information Visualisation" (CS5346) and "Data Management & Warehousing" (BT5110), I prioritize open communication and active learning. By actively engaging with students, addressing their questions, and encouraging critical thinking, **I aim to create an inclusive and stimulating learning environment where all students feel supported.**

In introductory programming courses, where students often face the challenges of programming for the first time, my teaching approach is designed to offer a supportive framework. By setting clear objectives, fostering interactive engagement, and offering personalized support, I help students navigate the complexities of learning with confidence. My experience tutoring interdisciplinary courses at NUS Business School further honed my ability to adapt my teaching for students from diverse academic backgrounds, ensuring that they, too, could grasp complex concepts and thrive.