

# Teaching Statement

## Ashraful Islam, Ph.D.

Educators, in my opinion, may not only assist students in acquiring new analytical skills, but they can also ignite a passion for studying, enhance their comprehension of real-world events, and foster the growth of their own innovative thoughts. This conviction fuels my dedication to student success and my love for the classroom. One of my greatest motivations for pursuing an academic career is the chance to interact with students through teaching, mentoring, and learning. My teaching philosophy is founded on observations of aspects of teaching that help students learn better, which emerge from both my experiences as a student and my own experiences delivering lectures. Sharing the enlightened power of literature with students, instilling in them an insatiable appetite for knowledge, and enabling students to experience freedom through the exercise of critical thinking is why I enjoy teaching. Teaching provides me with a sense of purpose, a rare commodity. My dedication is also a sign of my appreciation for the outstanding teachers who encouraged me to pursue a career in academia and from whom I have gained the knowledge I attempt to impart to my students.

Immediately following my undergraduate final semester exams in May 2016, I started my career in Bangladesh as a Computer Science and Engineering (CSE) lecturer at Bangladesh Institute of Science and Technology (BIST). I later headed to Daffodil International University (DIU) in January 2017 and continued my teaching there till I started my Doctoral study at University of Louisiana at Lafayette (UL Lafayette). As a lecturer of CSE at BIST and DIU, I was responsible for teaching various core computer science courses including *Programming and Problem Solving*, *Programming Languages*, *Database Management System*, *Data Structures*, *Algorithms*, *Operating Systems*, *Compiler Design*, *Simulation and Modeling*, *Theory of Computing*, and *Data Communication*. Moreover, at DIU, I had experience as a course moderator for designing course contents for undergraduate level *Operating Systems* course and moderating the course among the participating faculty members. Furthermore, as a Graduate Teaching Assistant, I have had various opportunities to refine myself as a teacher and mentor by working with diverse groups of students from different cultures while pursuing my graduate studies at UL Lafayette. The *Data Structure and Software Design in Java* course is one that I have taught and tutored at UL Lafayette for seven semesters. The evaluations I received from my students for the courses I taught at DIU, where I consistently received an overall average teaching performance score of 87%, demonstrate my success as a teacher.

As I now find myself having experience in teaching the undergraduate levels, I realize that my adherence to the following three principles has served as my compass throughout my passion and career: (i) dedication to the development and use of realistic evaluations that influence the learning tasks among my students, (ii) passionate to fostering healthy, respectful, and trusted relationships with my students, and (iii) devoted to providing personalized formative feedback to students in order to enhance their learning capabilities. I believe that the main goal of the teaching of a subject is to ignite the inquisitive minds of the students to inquire and learn the subject by themselves. It is highly important in CSE, as it is one of the most rapidly changing fields.

During the lectures, my goal has always been to excite the students on the topics and provide examples to understand them properly. While delivering ideas, I do not always provide everything upfront. Instead, I explain concepts and challenges in such an orderly manner so that

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the students get triggered to ask questions. Solving critical problems by students with minimal hints from a teacher and working in-group projects will also help students in meeting this goal. In addition, to educate and prepare my students, motivate and inspire them are also my major goals. I have provided a dedicated effort to improve my teaching and presentation skills by observing if the students are understanding the concepts. By engaging in discussions with them, I try to identify the concepts that I may not have been able to convey clearly. I believe that materials learned through such interactive conversations have a lasting impression on the students.

I tell my students not only what to learn and how to learn but also why they need to learn the subject. Humorous and real-life examples stemmed from my professional experiences will be two main ingredients of my interactive lectures to keep the students attentive, involved, and enthusiastic. While delivering a lecture, I read the students' faces to determine whether they are gripping the ideas well, and I adapt my lecture/explanation going down to the students' level. It is important that the students always feel comfortable in asking questions and providing feedback, as it helps them learn to articulate their thoughts and approaches. To build a strong rapport between the students and myself, I make myself available outside the classroom for consultancy, early resolution of any issues, and assistance for students needing additional help.

In summary, I would be glad to teach both graduate and undergraduate level courses in a wide range of topics in the field of CSE. I have specific interests in teaching core and advanced CSE courses including *Programming Languages and Problem Solving*, *Data Structures*, *Algorithms*, *Databases*, *Artificial Intelligence*, *Image Processing*, *Machine Learning*, *Pattern Recognition*, *Data Mining*, *Information System Design*, and *Human-Computer Interaction (HCI)*. I am also interested in teaching other CSE courses not stated above. I will enjoy working with other faculty members on developing new courses or adapting existing courses to keep the curriculum up-to-date. I am also interested in conducting online learning courses and can instruct distance learning students. As an HCI enthusiast, I will also be very glad to design, develop, and teach different new beginner and advanced level HCI-specialized courses such as *Human-AI Interaction*, *User-Centered Research and Evaluation*, *Interaction Design and Techniques*, *Data Analysis and Visualization*, *Embodied and Social Interaction Design*, *Human Factors*, *Human-Centered Product and Service Design*, *User Experience Design and Evaluation*, to name a few.

I am looking forward to starting the opportunity to help students find their potential and better prepare them for their careers. I believe my experiences and contributions will be a resource for my future students. I am excited to mentor graduate and undergraduate students to help them become independent researchers and industry professionals. I eagerly look forward to resuming my career as a full-time faculty member and make significant contributions to the department and the university through teaching, mentoring, research, and various professional and academic services.