Teaching Philosophy

My primary objective in teaching computer science courses is to prepare students as problem-solvers in thus constantly changing world. Students will often be required to communicate effectively with co-workers and customers from different backgrounds and with different needs. Toward this goal, I believe that three factors are essential. First of all, the students have to fully understand the fundamentals in the courses that I will introduce. Second, I intend to foster their critical thinking ability so that they can accept, integrate, and apply new information to future technology as it arises. Finally, I hope my classes will inspire them to find the joy of learning, which in turn motivates them to pursue their life-long learning.

To help my students to comprehend the fundamentals, I will carefully plan my lectures in detail and deliver them in an interactive manner. First, I will organize lectures centered on key concepts so that the overall lecture can unfold in a natural progression. I will make active use of various media, visual tools, and concrete examples in my teaching. For evaluation, I view tests as a good opportunity for students to learn important concepts effectively rather than a chance to rank them. Therefore, I will provide a list of candidate questions crucial to their learning beforehand in order that they can have confidence in preparing for the test and learn important concepts. After evaluation, I will provide them with fast feedback in order to keep them motivated.

To encourage students to develop their critical thinking, I will use a student-centered approach that values student participation. A small-sized class setting with less than 20 students is ideal for engaging students in communication with each other in various ways (e.g., discussing, debating, questioning, answering, and presenting). For a large-sized class setting, I will encourage collaborative activities such as group discussions and team projects. Since students differ in their abilities, interests, personality, learning style, and motivation, I will provide several choices in assessments so that they can control their learning experience. Most of all, I will sincerely listen to what students want to learn in my class and reflect their input in my curriculum to foster their motivation.

In today's world it is vital to embrace lifelong learning. To emphasize this I will share my own passion for learning and show its role in the development of my career. Computer science technology keeps changing rapidly. In my industry career, I have often needed to learn new technology, which was not included in my course work. At LG Electronics, I was in charge of web programming and given just a month to learn the new technology. At SAIT, I have been leading a machine learning based project even though I specialized in symbolic approaches in AI. My experiences show that learning does not stop at college but extends through our lives. My own passion for life-long learning has enabled me to progress throughout my career.

Teaching is a challenging profession that requires constant improvement. I have learned from my teaching experiences that there is no one teaching method that is universally effective. Variations in students and learning environments require flexibility. Therefore, I will adopt student-centered approaches built around a well structured curriculum. Through these approaches, I will promote students critical thinking skills and prepare them to be life-long learners.