Statement of Teaching Philosophy and Practice

Teaching Philosophy

I believe successful teaching should achieve two goals: conveying knowledge of the discipline and instilling enthusiasm of learning for a lifelong experience.

One of the important factors of effective teaching in classroom is to cultivate and sustain students' motivation of learning, both of which can be achieved in a stimulating classroom environment. In addition to having a good grasp of the discipline and a good preparation of the topics, it is important to teach by example: students can better absorb knowledge when taught in context and with real-world applications. It is also important to keep up with the fast-changing field as computer science in teaching, by constantly updating course topics, materials, and projects. For lectures I prefer the combination of using slides and whiteboards. For programming courses, I prefer working on examples with the students in class and using live demonstrations. Regardless the methods it is important to engage the students to actively participate in a responsible role. For graduate-level courses, I prefer having the students to choose individual or group projects. This would allow the students to investigate relevant topics in more depths, practice through real applications, and also improve on collaboration and communication skills.

I take pleasure in mentoring students, including both graduate and undergraduate students. A good mentor not only should provide guidance to students to achieve learning in specific areas, but also need to become a positive role model for the students through enthusiastic learning and diligent research. There is no question about the mutual benefit between research and education. I urge the students to participate in regular group meetings because I believe that the team-oriented approach can help create a more collegial environment for students for collaborative work, better understand research methods, and more quickly to develop important skills and critical thinking.

Teaching Practice

I have taught many different courses during my tenure at FIU, including data structures, computer programming, computer networks, operating systems, parallel computing, and simulation and modeling. I have also proposed a new undergraduate course: "Introduction to Parallel Computing" in 2008, which I have been teaching constantly ever since.

I have supervised one postdoctoral student, more than ten graduate students, and over twenty undergraduate students. Most graduate students have been supported through the research grants that I received. Among the students, six Ph.D. students and two M.S. students have been graduated. In addition to these students, I have also helped supervise students' research together with my colleagues. I have participated in numerous Ph.D. thesis committees.