

I think that teaching actually consists of two important components: teaching and learning. Teaching is a way to pass teacher's knowledge, idea and experience to students via giving lectures, guiding labs, and grading homework; learning is a process mainly involved students who actively get the information and go beyond. I believe the quality of teaching and learning also depends on the interaction between these two components. Click [http://www.r2image.com/TRS\\_Demo/](http://www.r2image.com/TRS_Demo/) for a demo.

Addressing students' concerns/worries can give them a positive motivation of learning a class. Usually I asked the students what the purpose of this course is, and how much knowledge they have. For example, Computer Graphics, at the beginning some students may feel the difficulty (too much mathematics) or no purpose (unlikely used in their future career). I think first two introductory classes are very important to paint a big picture (context), to demonstrate course applications, and to explain the instructor's strategy/help on some challenging topics.

Positive encouragements are greatly helpful to enhance students' confidence and interest. In my classes, excellent homework and diverse solutions are always welcome, and then introduced to the entire class. On the other hand, when students have difficulties in doing projects, additional help and positive encouragement are very important.

Early involving students (like undergraduate) in research activities plays an important role in keeping their interests with computer science and computer engineering. Exposing students to research environment helps enhance their problem solving skills, and more importantly keep them with engineering fields for their graduate study and future career. I support both graduate and undergraduate students working on my research projects.

The measurements of success of quality teaching shall focus on how much improvement the students have achieved in a specific area/class. I usually compare their scores of midterm exam and final exam, or look at the progress of their assignments/projects over time.

I enjoy teaching not only because the students will learn & achieve in my class but also because I can learn a lot from my students. Students' feedback (comments & suggestions) can help me enrich and improve my course materials. I often revise my lecture notes, assignments, and demonstrations based on students' comments and homework accomplishments.

So far my teaching experience concentrates on *Image Processing* (like Digital image processing, Physics for medical imaging, Biomedical computing), *Computer Network* (Networking fundamentals, WAN technologies, Switching and routing basics), and *Computer Programming* (Data structures and algorithms, Network programming with C#, Web design and internet programming using C#). I have the capability to develop and teach new classes based on industrial market analysis. For example, "Network Programming with C#" was a new class that I introduced and developed in 2009 based upon the following facts. (i) C# is a hot language that inherits the advantages from C++ and Java, and C# program can be integrated into web applications (e.g., ASP); (ii) Students majoring in computer networks could not do much thesis project related with network programming due to lack of programming skills; (iii) C# has a relatively big market share (compared to VB, C). The following goals were set up for this course: (1) To consolidate the knowledge learnt from Computer Network courses by implementing network applications; (2) To empower students to do course/thesis projects by using programming tools; (3) To enhance students' background for their future career. After the two-semester teaching of this course (Spring 2010-2011), Goals (1) & (2) were achieved in my classes.

Some courses (about 40% of major courses) are offered online using Blackboard. So I have rich experience in developing and teaching online courses. I got my CCNP (Cisco Certified Network Professional) certificate in July 2011. I am very confident in teaching Cisco Academy Courses, and also willing to help students get their industry certifications (like CCNA or CCNP).