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# Statement of Teaching Interests

Having been educated in several different universities, I understand that quality of education makes a huge difference in a student's career decisions. Thus, I believe that professors should place the highest priority on preparing and teaching courses. However, most professors also have research responsibilities. Therefore, if at all possible, professor should integrate their research topics into the lectures and/or the projects. By designing the courses in such a way, not only will the professor be able to teach with greater passion but the students will benefit from being exposed to the most current research topics.

## 1. Teaching Experience

Teaching is a great passion in my life. I believe it is a privilege to teach individuals to understand and to love the topics that I also love. Therefore, for every course that I have taught in the past, I spent much time preparing, organizing, and learning the material. I found that the long hours of careful course preparation helped me to clearly express the key concepts of the course. I found that documenting and organizing the teaching materials is very helpful in preparing for the same or similar courses in the future. Therefore, I document every piece of teaching material and store the copy in a portable form.

My university level teaching experience began while I was an undergraduate at Berkeley. Having taken both undergraduate and graduate level computer architecture courses, I had assisted Prof. David Patterson and Prof. David Culler in teaching two semesters of upper division computer architecture [EECS152]. While teaching the courses, I gained insight into the course topics as well as organization and teaching techniques. By committing long hours in preparation, I gained the respect and the trust of my students. At the time of graduation from Berkeley, I received an award for outstanding teaching assistant.

By the time I became a teaching assistant for the computer architecture course [CSM152] in UCLA, I had accumulated a lot of teaching material for the course. Therefore, I integrated additional advanced topics to give the students freedom to dig deeper into the subjects. Seeing my enthusiasm for the course materials, all my students spent extra time and effort to go beyond the course syllabus. I taught two other courses in UCLA, VLSI System design course [EE116B] and Digital Electronic Circuits [EE115C] with similar enthusiastic results from the students.

After my graduation I went to Washington University in St. Louis as a visiting assistant professor. Although I was hired to conduct academic research, I had an opportunity to teach Graduate Level Computer Architecture course [CSE560M] in Fall 2005. Since I had all the traditional teaching materials for the course, I spent my preparation time to design the syllabus that allowed the students to apply what they learned to improve their own research. As a result, two out of seven group project results have been accepted to the conference for publication as short papers.

## 2. Future Course Plan

Other than the previously mentioned courses and similar introductory and advanced courses in electrical engineering and computer sciences, I am very interested in teaching and designing courses related to all aspects of my research plans. With that motivation in mind, my research utilizes the key concepts from the field of reconfigurable computing (i.e. high performance FPGA design course), computer network (i.e. packet filter/classification and network security), parallel computing (i.e. parallel compilers and operating systems, distributed processor/memory system, and inter-nodal communication), embedded computing system (i.e. reconfigurable devices, system-on-a-chip, and software/hardware partitioning, wireless sensor network), and artificial neural networks (i.e. hardware acceleration of data-mining applications).