

Teaching Statement

Muthian Sivathanu

The teaching component of an academic career is something that I am excited about. I have been fortunate to be taught by some excellent teachers during my undergraduate and graduate study, that has been instrumental in my developing interest in the systems field. I hope to create the same level of impact and interest in my own students. I think one of the main roles of a teacher is to kindle deep interest in a subject; interested students will get the most out of a course, both inside and outside the classroom.

The specific courses I will be interested in teaching are introductory and graduate level courses in operating systems. The introductory course would teach the basic concepts in operating systems, and also provide students an intensive hands on experience with systems programming, either in a real system, or on an instructional operating system such as NachOS. I would like the graduate course to be a readings based course where I introduce students to various advanced topics and recent research ideas in operating systems. This graduate course will also require students to complete a research project.

In addition to these two courses, I will also be considering putting together a general "systems" course that is at the advanced undergraduate or entry graduate level, that presents a holistic "vertical" view of multiple related areas in systems, i.e. operating systems, computer architecture, database systems, storage, networks, and performance evaluation. This course would require intro-level knowledge on each of these areas, but will serve to tie these areas together, perhaps through cross disciplinary projects, and a special focus on the interfaces between these areas. Occasionally, I also plan on offering "Special topics" courses focused on a relatively narrow area such as storage systems or virtual machines.

In addition to operating systems, I am also interested in teaching introductory courses on computer architecture, database systems, and networking.

In short, I am looking forward to the opportunity to teach both undergraduate and graduate students, and believe that it will be an enriching experience for my students and myself.