

GOPI MEENAKSHISUNDARAM

Teaching Statement

Motivation:

My fascination for teaching started when I was in my high school. I started appreciating various techniques used by my math teachers who were instrumental in motivating me into mathematics, later to computer science. Analyzing why certain techniques are very effective teaching methods and others are not became part of my learning process in every class I attended. Further to learn more about teaching I took a course on teaching offered by Prof. Frederick Brooks and Prof. Steve Weiss at UNC. Both professors are universally well known teachers and administrators. Prof. Brooks is the founder of our department and winner of Bower Award and Turing Award. Prof. Weiss is the chairman of our department and has won various prestigious teaching awards including 1997 "North Carolina Professor of the Year" award, and 1997 University of North Carolina's "Board of Governors Award for Teaching Excellence".

Experience:

I was fortunate to be associated with Prof. Weiss again, when I assisted him in teaching COMP 114 (Foundations of programming languages). I taught one of the recitation sections with 40 students for the above course. I employed most of the interesting methods that I learnt throughout my school life in the course (COMP 4: Power tools of mind) I **taught** at UNC. I was responsible for framing the syllabus, schedule, and examination, as well as teach this basic undergraduate course. I am assisting Prof. Anselmo Lastra with COMP 114 this semester.

Philosophy:

As a result of these teaching experiences, I have developed my own philosophy of teaching. Organization of the content is as important as, if not more than, the content of the course itself. Good teaching technique and organization of teaching material would help index the contents of the course into the cognitive memory of the students. This in turn will help them in easy retrieval and aid them in exploring the inter-relationships between the contents of the course. Further, assignments should be designed to strengthen this ability to find the relationship between different topics of the course. I also believe that course design and teaching should accentuate the fact that formal analysis and abstract reasoning go hand-in-hand with practical skills in classroom training.

Courses I would teach:

Only if I am enthusiastic about the subject myself, I believe, I will be able to induce enthusiasm in students. I love to teach undergraduate courses which are discrete and algorithmic in nature, like data structures and algorithms, digital logic, parallel and distributed computing, numerical analysis/methods, and discrete structures. Graduate courses should motivate students to do research. This would be well accomplished if I teach graduate courses in fields of my expertise which include computer graphics, geometric modeling, topology and geometry for computer graphics. Further, my seminar courses for graduate students who are already doing research in graphics and geometry will be designed to enrich both their core and supporting knowledge in these fields.