EECS 598

Special topics in the probabilistic analysis of large scale systems

Monday and Wednesday 12noon-1:30pm
Fall 2014

The course will focus on emerging topics in epidemics and diffusions, queueing systems, analysis of randomized algorithms, Bayesian information cascades, network analysis and random graphs. Theoretical topics on martingales, Markov chains, branching processes, and the Chen-Stein method relevant to the applications will also be covered as a part of the course. The goal of this course is to expose students to problems in these areas and the analytical tools used in obtaining solutions. No textbook is required for the course. Any relevant material (book, book chapters, paper) will either be referenced or provided during the lectures.

Students will engage in a term project. Students will form teams of two or work individually. Each team will select a project topic, will study a set of papers (or book chapters) related to the topic, will write a critique of the material, and will give an oral presentation at the end of the semester.

Prerequisites: EECS 501 or equivalent (alternatively, Permission of Instructor)

Instructor: Prof. Vijay Subramanian, Electrical Engineering and Computer Science.
For additional information contact <vgsubram@umich.edu>.