CS678 Course Outline
Topics in Internet Research

Description:
This year the course addresses five different topics, all related to Internet research. Information about these topics is provided in class. Each topic will cover about 4 to 6 research/tutorial papers/standards. Each paper will fall into one of three different categories: classic papers, tutorial papers, and recent results. Students are expected to write summaries and participate in a class discussion. At least the first lecture in each topic will be a tutorial overview of the topic. A term project is required that students can do in groups of two, at most.

Goals:
- To acquire a theoretical understanding of Internet related topics
- To the mathematically treatment of current internet problems
- Become familiar with literature reading in order to further the research abilities
- Read up on algorithms and architectures that the students may run into

Prerequisites:
1. Introductory Probability Theory.
2. Computer Networks.

Talk to the instructor if you are not sure whether you have the right background for this course.

Detailed Contents:
1. Switching/Queuing
2. Routing
3. Congestion Control + End-to-End
4. Ad Hoc Networks, Wireless LANs, Mobile IP
5. IP Multicast or Internet Security