Course Introduction/Overview

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CS 7001

August 21, 2006

Goals: Skills for Doing Great Research

- Get feet wet right away!
- Inspiration for open problems and big ideas
  - Emphasize big perspectives, not individual faculty research
- Tools
  - time management/productivity
  - how to **read** a research paper
  - how to **review** a research paper
  - how to **write** a research paper (technical writing)
  - how to **generate ideas**, sources of problems
  - information management (research notebooks, etc.)
  - how to give a **good talk**
  - how to write a **proposal**
  - how to be a **good TA**

CS 7001 Now Has Assignments

- **Goals:** Develop research skills, Explore other areas

- Team projects by research areas
  – Students do assignments in groups

- **First assignment:** Select, summarize (in presentation), defend 2 conference papers from last year's "top" conference. Describe a future research problem…
  – Goal: Problem selection/reading papers

Summary of Projects

- **Option 1: One course project**
  - Course project: come up with something publishable/presentable
  - Can overlap with 8903
  - One 6-page writeup

- **Option 2: Mini projects**
  - Two or more mini projects
  - Minimum length: 5 weeks
  - 4-page writeup each

- **Minimum:** One semester-long, 2 mini-projects

Tradeoff: Exploration vs. Depth