

Course Mechanics

CS 3610

- Professor:
 - Liz Marai (marai@cs.pitt.edu)
 - SENSQ 5423
- Course website:
<http://www.cs.pitt.edu/~marai/cs3610>
- Seminar-level class
 - open to CS grads
 - open to grads in other departments

Who Should Take CS3610?

- CS, CoE, SIS grads
 - with good software engineering skills (OO design and programming, debugging)
 - interested in modeling and visualization
 - interested in interdisciplinary work
- Grads (and faculty ;-) in other departments
 - interested in modeling and visualization
 - interested in collaborating with computer scientists
 - have project ideas that require the above items
- **If you don't have any graphics experience, you CAN take this class** (but get ready to invest some time early on)

Getting to Know Each Other

- First assignment: fill in Personal Background sheet linked from course webpage (under Syllabus) and email it to me by Thu

- Have your picture taken at the end of class today
😊

- In ~ 2 weeks: check out Image Gallery and personal backgrounds on webpage

Course Structure

- CG, modeling and visualization techniques to solve scientific problems
 - lectures (visualization basics)
 - guest-lectures (interdisciplinarity)
 - paper-reading and presentations
 - 3 warm-up assignments (tutorial style)
- Heavy use of visual materials such as videos and live demos
- Final project



Readings and Presentations

- Readings:
 - all online (color imagery), through website
 - b/w printing fine, but look at images in color
 - some copyrighted (user & password)
 - some huge (50 Mb; don't use phone line)
- Presentations:
 - everyone presents 2 papers this semester
 - 1st round presentations schedule (01/22-02/26): wait for email from me
 - mid-semester: another round of presentations

How to Prepare for Readings

- What is the problem (specifically what tasks does it solve)?
- What assumptions are made?
- Who are the intended users of the research?
- Have those users been involved in the design or evaluation of the work (i.e., is the solution usable?)
- Is the solution scalable (how much data does it work with)?
- Is the solution generalizable (does the solution work in other domains)?
- What is the key contribution?

Slide from B. Shneiderman

Presentations

- Everybody:
 - hand in paper-review form for each paper we discuss (see website under Syllabus)
 - paper review due **before** class
- Presenters:
 - 25-minute slide presentation (ppt, keynote, or pdf)
 - schedule practice talk with me the evening before class
 - content (at least these items):
 - Description of the paper
 - Where possible show demos or several screen shots
 - “My favorite sentence”
 - Contributions
 - Notes on the references
 - Critique — strengths and weaknesses
 - What has happened to this topic?
 - use white background* on slides

Research Class

- Creativity
- No “right” answer
- Reasoning/argument is more important
- Self motivation
- Open ended
- Contribute to the state-of-the-art

Slide from B. Shneiderman