Adaptive Information Systems
INFSCI 2480

Syllabus

Logistics MS

- Attendance
- Learning the topic
  - Topic readings and discussions
  - Playing a moderator
  - Research paper presentation
  - Research seminar
- System analysis project
- Programming project
- Final Project

Readings and Discussions: The Process

- There is assigned reading for each class on the presented topics
- To process and better understand each topic we will run a forum-based discussion
- Two students each week will play the role of moderators and challengers
- Two students will read alternative research papers on the last class topics
- At the start of each class, we will have 2 research paper presentations and a discussion of past class topics

Assigned Readings

- Each week, we will assign 1-2 chapters from the Adaptive Web Book or similar review-style papers

  http://www.springerlink.com/content/x646782t122p/#section=372718&page=1
- Read at least ONE of the assigned sources
- You do not need to comprehend all in details, but should have a good command of the presented topic
  - Your system analysis project and final project reports should demonstrate strong connections to the chapters you read. It is a part of your grade.
- Focus on unclear, non-evident, hard to understand issues that require discussions

Response to Assigned Readings

- Each student is expected to provide at least two *expanded* contributions each week
  - Not just 1-2 lines
  - Comment on a fragment of the paper, introduce a new issue or provide an expanded comment to an existing post
- Which issues?
  - Hard to understand, questionable, surprising, misses, improvals, connections to real life
- Once per semester you will play a role or a topic moderator
  - Moderator should read a chapter in detail, preferably BEFORE the lecture
  - Main goal to comment and discuss posts, but also to rise missed important issues
  - A good number (20) or comments from a moderator are expected. No need to be extensive

Research Reading

- Choose a course topic
  - 1-2 students per topic only, might not get your top choice!
  - Subjects have to be selected by the next lecture, TA will manage the list
- Find one paper on the selected topic (CiteULike is a good source)
- Prepare summary and PPT presentation
- Present in class (5 min!)
  - At the beginning of the class following the lecture on the topic

Research Seminars

- Use CoMeT system for Research Seminar Sharing:
  - http://halley.exp.sis.pitt.edu/comet/
- Monitor what is presented there, track interesting events
- Attend *two* relevant research seminars on the adaptive systems topic over the semester, send a summary to instructor, if approved, post a summary to the courseweb forum
- There are many interesting seminars, some not shown in CoMeT – look around!
- Post missing seminars, get extra credit!
- Bookmark talks you plan to attend!
- CoMeT could be a source for final projects

Assignments

Assignments

1. CourseWeb assignment

   Post information "About You"

   Post a suggestion of an interesting topic or issue that you would like to hear/learn in the course

2. Programming assignment

   practicing adaptive IS technologies

Learning Journal

Reflect

- Maintain a blog - your learning journal
- Each week post a reflection on your “own” paper, other readings, attended seminars, topics covered last week, your thoughts, ideas, connections
- At least two paragraphs to be posted by the next class on your blog
- The blog can be private if you wish, but the instructors should be able to see it for grading. Classmates could be also added if possible.

System Analysis

Work as a business analyst in a group of 3-5 students

Explore

- Explore a group of similar adaptive systems – industrial or research-level

Analyze

- Distill main ideas, guess (or read) which algorithms and approaches are being used, identify design issues, key problems

Compare

- Show how systems in the same class differ from each other by the distilled key features

Present

- Prepare a structured PowerPoint presentation, deliver in class. Go deep, try to deliver the stuff that goes beyond the surface features. Connect to what you learn in class!

List of Topics

- Movie recommenders (i.e., MovieLens)
- Music recommenders (i.e., last.fm
- Web page recommendation (i.e., StumbledUpon)
- Personalized shopping (I.e., Amazon)
- Event recommenders (CoMeT, Eventur..)
- People recommendation (i.e., LinkedIn)
- <Your Topic May Be Here>
- Pick up your preferred topic ASAP!

Topic Presentation

A possible option for a senior PhD student:

Play a teacher for 1/2 a class!

Read

- Read 3-5 overview-rich papers on the topic, prepare summaries and post to your learning journal

Analyze

- Distill main topics, issues, problems, developments

Present

- Prepare a structured PowerPoint presentation, deliver in class

Reflect

- Edit a section of the class Wiki on this topic: a brief, but structured presentation with a short intro and a separate section for each critical topic, issue, or system

Final Project

- Prove that you can do it!
- Work in groups and learn from each other
- Enhance an existing system with personalization features
- Develop your own personalized system
- Present your work at the last class meeting
- Submit a report
- Mid-semester checkpoints