

# **Adaptive Web 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

- To better comprehend the topic, we will hold a discussion using FLIP system (TBA)
- 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!
- 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