CSC2231 Online Social Networking Systems

http://www.cs.toronto.edu/syslab/courses/csc2231/07au/

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What this course is not about

- · Social networking is a research topic in many fields
- In this course, we will not examine:
 - Theoretical properties of social networks
 - Developing models for explaining + analyzing social networks
 - Examining the social aspects of social networks
- Instead,
 - Build large-scale systems that enable mass communication in a social networking fashion
- This is an advanced systems course!

How to submit reviews

Demo

What this course is about

- A course in an emerging topic of systems research
 - Build large-scale systems that enable mass communication in a social network
 - Online social networking systems: wide-area distributed systems (including P2P, Web systems), search, content delivery, security
- Familiarize ourselves with papers in the area
 - Helps you go through the process of exploring emerging area
 - Helps you read and review papers
 - Helps you do a research project on a hot topic

What your role in class will be

- You have four jobs:
 - 1. Read and review 2 papers per class
 - · Submit review two hours before class
 - 2. Actively participate in class discussions
 - Come to class with questions, ideas, thoughts
 - 3. Prepare at least one research paper presentation
 - 4. Work in groups on a research project
 - $\bullet \quad \mbox{Quality must be similar to a publishable short paper}$

Paper Presentation

- Send me your preferences on the papers
 - You will be assigned a paper based on your preferences
- · Presentation will not last more than 30 minutes
 - I will stop your presentation after 30 minutes
- Presenter in charge of driving 20 minutes of discussion
- Presenter expected to setup a meeting with me on Tuesday before the presentation
 - This is not a requirement
 - It doesn't affect your grade, but it could affect your presentation

Research Project

- · Form groups
 - It's unlikely I'll accept a one-student group
 - Deadline is in two weeks Thursday 10am
- Choose a project topic
 - Submit project proposal
 - Deadline is in three weeks Thursday 10am
- Submit two project reports
 - First report due on November 1st
 - Second report due on November 29th
- Presentation due early December
- Final report

The List of Papers

- There is a paper assigned for today. Please read it.
- ...

How does a research topic become "hot"?

Systems research typically driven by technological changes

More Administrivia

- · Class times and location
 - Thursdays 11am to 1pm in Bahen 5256
- · Office hours
 - ???
- Grades
 - Research project 50%
 - Research presentation 25%
 - Paper summaries 15%
 - Class participation 10%

How does a research topic become "hot"?

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- Systems research typically driven by technological changes
 - Hardware changes:
 - Distributed shared memory
 - Faster processors (Moore's Law)
 - Bigger and cheaper memory
 - Broadband access networks (fast home access)
 - Multicore processors
 - Software (+ algorithms) changes:
 - Video and audio codecs (MP3, AVI, DivX)
 - Forward erasure codes
 - Better programming languages (type-safety, GC, etc...)

Is online social networking hot?

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• Why?

Online Social Networking Systems

- Facebook, MySpace, LinkedIn, Orkut
 - Attract tens of millions of users
 - Facebook has more than 1 million accounts from GTA alone
 - Some are among top most visited sites in the world
 - Most of these sites did not exist a few years ago
- Technology changes:
 - Personal cameras, camcorders <-- lots of personal media
 - Fast access networks <-- broadband
- Our goal: identify new challenges in building large-scale systems for managing, searching, delivering personal data in a social network?

Next Class

- Next week's class is cancelled
- See you in two weeks
 - Two papers to read
 - Two presenters will be assigned
 - Reviews due by 9am
- E-mail group members
 - Also due by 9am