INF5370
Distributed Technologies for Social Networks

Seminar overview

Lecturers: **Roman Vitenberg (romanvi)**
Teaching assistants:
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Outline

- Seminar overview
- Overview of the state-of-the-art
- Reading, reviewing, and presenting papers
- Discussion of the paper pool

Motivation

- We are witnessing an explosion in the scale of social networks
  - Twitter grew ~1200% between February and March 2008
  - Of the 10 most popular web sites, 5 represent social networks
  - Facebook users constitute more than 1/7 of world population
- Challenges
  - How to scale architectures for social networks & applications?
    - A Twitter architecture has been revamped a couple of times
    - Users still complain about losing notifications about new tweets
  - How to address privacy concerns about social networks?
  - How to build decentralized social networks?
  - How to enhance existing applications (such as P2P data exchange or media streaming) by exploiting social networks?
- More in the overview of the state-of-the-art

Learning goals

- The seminar provides students with a basic understanding of state-of-the-art in the area of architectural advances for social networks
- The seminars covers
  - Online social networking (such as Wikipedia, Facebook, Twitter)
  - Mobile social networking (including sensornet services and delay tolerant networks)
  - Analysis of data and relations in social networks
  - Selected aspects of content distribution services such as
    - *Incentives in social networks and in content distribution*
    - *P2P streaming and its use in social networks*
    - *Dissemination schemes for social content.*

Seminar elements

- 1-2 lectures
  - overview and challenges
- Paper pool
  - About 15+ papers of various lengths
  - Constitute (most of) the examinable material
- One paper presentation per student
  - Other students must submit a short summary (2 paragraphs or half a page) before the presentation
  - Act as opponents during the presentation
- Elements of student presentations
  - Paper presentation
  - Personal reflection on and criticism of the paper
  - Questions for discussion
  - We as the teachers provide guidelines for the above

Exam and grading

- Mandatory summary submission for each student presentation (except your own)
  - Not graded but it is a prerequisite for taking the exam
  - Must be emailed to Abhishek at least one day before the presentation
- Oral exam
  - paper pool and other results of seminar activity
- Grading based on
  - presentations (~ 30-40%)
  - participation (~ 10-20%)
  - oral examination at end of seminar (~ 50-60%)

Recommended prior knowledge

- INF1060 – Introduction to Operating Systems and Data Communications
- INF3151/INF4151 – Operating systems
- INF5040 – Open distributed systems

Plan for the rest of the course

- Today 16th January
  - Overview of the state-of-the-art in the area
  - On reading, reviewing and presenting research papers (Roman)
- Lecture 23rd February
  - Presentation of the seminar topics
- A detailed plan will be provided soon afterwards
  - We will collect your preferences wrt the dates and topics and build a schedule
- First student presentation: (tentatively) 6th February