CS4501 Information Retrieval Course Policy

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Goal of this course

- Discuss fundamental problems in information retrieval
  - Building blocks of search engine systems
  - Wide coverage of many IR applications
    - Personalized recommendation
    - Online advertising
- Get hands-on experience by developing practical systems/components
- Prepare students for doing cutting-edge research in information retrieval and related fields
  - Open the door to the amazing job opportunities in IT industry

Prerequisite

- Programming skills – Important!
  - Basic data structures: CS 2150 or equivalent
  - **Java** is required for machine problems
    - Most open source packages are written in Java
  - Any language you choose for the rest of this course
  - Linux system!
- Math background
  - Probability
    - Discrete/continuous distributions, expectation, moments
  - Linear algebra
    - Vector, matrix, dot product
  - Optimization
    - Gradient-based methods

Structure of this course

- Lecture based
  - Six major topics will be covered
    - E.g., Search engine architecture, retrieval models, search evaluation, relevance feedback, link analysis, and IR applications
  - Introduce state-of-the-art large-scale document processing techniques
    - E.g., MapReduce framework, Apache Spark and GraphLab

Grading policy

- Homework (55%)
  - Written assignments (~2)
  - Machine problems (~4)
- Midterm exam (25%)
  - One week before Thanksgiving break
- Option A: final exam (25%)
  - In the exam week
- Option B: course project (25%)
  - Explain later

No curving will be applied!

fairness will be guaranteed by the instructor

Course project

- Graduate students
  - Required, as a replacement of final exam
  - Topics
    - Implement algorithms in assigned research papers
    - Self-selected topics with permission from the instructor
  - Evaluation
    - 10-minutes in-class presentation (50%)
    - Written report (50%)

Course project

- Undergraduate students
  - Optional for those who have excellent performance in the midterm exam
  - Topics
    - Implement algorithms in assigned research papers
    - Self-selected topics with permission from the instructor
  - Evaluation
    - 10-minutes in-class presentation (50%)
    - Written report (50%)

Late policy

- Homework
  - Submit via Collab (no extension)
  - Late penalty: 15%, two weeks after the due date; 50%, afterwards
- Midterm/Final exams
  - No make-up exams unless under emergency situation
- Course project
  - Final report due before presentation (no extension)

Classroom participation

- HIGHLY APPRECIATED!
  - Helps me quickly remember your names
  - Reminds me what is still confusing
  - You can drive the lecture/discussion in this class!

Contact information

- Lecture
  - Instructor: Hongning Wang
  - Time: Monday/Wednesday 5:00pm to 6:15pm
  - Location: Olsson Hall 120
- Office hour
  - Instructor's
    - Time: Monday/Wednesday 4:00pm to 5:00pm
    - Location: Rice Hall 408
  - TAs'
    - Time: Tuesday/Thursday 2:00pm to 3:00pm
    - Location: Rice Hall 414
- Course website
  - Website: http://www.cs.virginia.edu/~hw5x/Course/IR2015/_site
  - Piazza: https://piazza.com/virginia/fall2015/cs4501/home

TAs

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Thank you!

QUESTIONS?