CS525 DATA MINING
SYLLABUS

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Contact Info

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Course Info

- **Reference Book**: Data Mining Concepts and Techniques
- **Author**: Jiawei Han and Micheline Kamber
- **Publisher**: Morgan Kaufmann
Course Info

- **Grading:**
  - Midterm: 40%
  - Survey Paper: 20%
  - Project: 40%
Topics that will be covered

- Different Data Mining Techniques
  - Association Rules
  - Classification
  - Clustering
- Data Mining and Privacy Issues
- Applications of Data Mining
A Rough Schedule

- March, April:
  - Lectures on various data mining techniques
- Remaining weeks: Project presentations and discussions about research issues
What I will do

- Give the basics on data mining
  - broad data mining concepts
  - research issues
- Project supervision
- Give directions and advise on the projects I proposed (will be provided in the next slides)
- Coordination of the project presentations
What I expect you to do

- I expect you to do things wrt your background and expertise.
- Students with CS background will do projects involving implementation and/or research.
What I expect you to do

- Understand the basic data mining concepts
- Choose a specific area and two related papers on the same topic for presentation in class
- Attendance is required for paper presentations and you will lose 2% of your overall for each presentation you missed.
- Write a term paper on the two papers presented.
- Do a project and a final report describing what you learned or achieved in the scope of the project.
Projects

- Text Mining
- Graph Mining (Social Networks)
- Web mining
- Bioinformatics
- Privacy preserving data mining
- ....
Some references

- Choose the latest papers (2019-2022)
- Here are the main DM Conferences
  - ACM KDD Conference
  - ECMLPKDD Conference
  - IEEE ICDM Conference
- Other related conferences
  - WWW Conference (The WEB Conf)
  - ACM SIGIR
  - CIKM