

CSE 291:

Trends in Recommender Systems and Human Behavioral Modeling

Week 1

Welcome!

- This class will cover recent trends in Recommender Systems and Behavioral modeling via examples from academic literature
- “Recommender Systems” here is broad enough to cover most *predictive problems that involve human data*, e.g.
 - Predicting activities such as purchases, ratings, clicks, etc.
 - Extensions of the above that make use of content, such as text, images, social information
 - Models of text (or images, videos, etc.) that are somehow “personalized”, i.e., which account for individual characteristics of each user
 - Models of social phenomena, such as the formation of social networks, trust/distrust, etc.
 - Deployment and evaluation issues, such as A/B testing

Welcome!

- A list of topics is provided on the course website, but if there's anything you'd like to present that's *not* among quite those topics, we can probably find room for it
- Jianmo Ni (jin018@eng.ucsd.edu) is the course TA, please ask him or me if you have any questions (or use the course Piazza: <https://piazza.com/ucsd/fall2017/cse291b/home>)

Why 291? (vs. 258 etc.)

- This course (mostly) covers the same topics as are covered in CSE258 (Recommender Systems and Web Mining)
- The main difference is that this class will cover *academic research* whereas 258 covers the *basic methods and models*
- You can take this class without having already taken CSE258 (or concurrently), but you should only do so if you are already comfortable with the material

Things to do for this class

- **Read** (at least superficially) the papers before class (I forgive you for today!). The paper presentations are intended mainly to guide the discussion of “why” the authors made certain decisions, and to help understand the paper’s intricacies
- **Participate in discussions** even if you are not assigned to discuss a paper that week
- **Present papers**
- **Complete a project**
- **Attend class!**

Paper presentation

- Sign up to give presentations by following the links on the course website
- Ask me if you need access to Google Drive!
- You should present **two** papers during the quarter, once in weeks 3-5, and once in weeks 8-10
- You can select any paper that's on-topic, including papers not among the "suggested reading"
- If you have any papers you want to present that don't fit the topics, or you want to present in weeks 1-2, let me know!

Paper presentation

- You are welcome to use slides (or not to)
- I'd vaguely suggest using slides given that **time is limited** - with the number of papers we need to present, we'll only have 15-20 minutes per paper at most
- Scheduling is **first-come first-serve**. Please use common sense and don't all try to schedule talks in the last possible week (etc.). If this happens we'll ask some people to give their presentations earlier
- You can present in pairs if you like, but please only do so as slots fill up

Paper discussions

- Given the size of the class, participations may be a little unfocused if it's just a free-for-all
- You should sign up to write discussion questions for **8 papers** during the quarter. You can add these questions to the Google Doc
- This should be pretty easy - just read those papers in a little more detail, and write down the questions you have
- If you're presenting a paper, make sure to read these discussion questions beforehand, and if you wrote discussion questions please participate in the discussion that week!
- I'll give some more advice on discussion questions in the next couple of lectures

Assignment

- The course assignment is concerned with implementing and extending an academic paper
- The spec is on the course webpage, but I'll discuss this more in the next couple of lectures
- You should present your work sometime in weeks 6-7

Grading

- Participation is worth 50%
- The assignment is worth 50%

Questions?