Stats/CSSS 567

Fall 2020, University of Washington


Reading: Readings come from several disciplines and, as such, assume different levels of background knowledge. You’re encouraged to read as comprehensively as possible with the understanding that readings might be assuming familiarity with topics that are new to you. Forming interdisciplinary study groups is also highly encouraged!

Week 1 Overview & introductions (Week of Sept 28)

• Slides
• SAND chapter 1 & 2
• Readings:
• Lab: No lab this week; sign up for Github.

Week 2 Local & global properties of graphs (Week of Oct 5)

• Slides
• SAND chapter 3 & 4
• Readings:

- Lab: Github practice Lab 1: SANDr chapter 2 & 3 (Graphs & Visualizing graphs)
- Homework 1

**Week 3 Modeling connections (overview/SBM) (Week of Oct 12)**

- Slides
- SAND chapter 6
- Class reading

**Week 4 Modeling connections (latent distance models) (Week of Oct 19)**
• Slides
• SAND chapter 6
• Homework 2
• Class reading
• Presentation reading
• Lab: Latent variable models for graphs with *latentnet*

**Week 5 Modeling connections (ERGMs) (Week of Oct 26)**

• Slides
• Class reading

- **Presentation reading**

- **Lab:** SANDr chapter 6 (Statistical Models for Network Graphs, ERGMs)

**Week 6 Peer influence & spillovers (Week of Nov 2)**

- **No class Nov 3; Election day.**
- We'll discuss class readings on Thursday and presentation readings will be asynchronous.
- **Slides**
- **Class readings:**

- **Presentation readings:**

Week 7 Peer influence & spillovers (Week of Nov 9)

• Slides
• Homework 3 Note: I combined HW 3 and HW 4, so this is the last one!
• Readings
• Presentation readings:


• Lab: Fitting the linear in means model

**Week 8 Collecting network data (Week of Nov 16)**

• Slides
• SAND chapter 5
• Class readings
  – Presentation readings:
• Lab: Exploring missing data & egocentric graphs

**Week 9 No class (Week of Nov 23)**

• No class; holiday.

**Week 10 Network models in the era of "big data" (Week of Nov 30)**

• Slides
• Class readings:


• Presentation readings:

• Lab: Scrape data using rtweet.

Week 11 (Week of Dec 7)

• Virtual poster sessions.