## Day 1 - Intro

UMN CSS Workshop 2025

Instructor: Alvin Zhou

#### Welcome

- Location: 32 Murphy Hall (basement)
- Dates: June 2 Monday June 6 Friday, and then June 9 Monday -June 10 Tuesday
- Time: 9am-12pm (mostly lecture) | 1 hour lunch break | 1pm-4pm (mostly coding lab)
- We may end early for mornings and afternoons if the content finishes early
- Especially for afternoons, if you and your group finish coding tasks early

#### Group

- Group 1
  - Gretchen Corcoran
  - Jikai Sun
  - Shreepriya Dogra
  - Jialu Fan
- Group 2
  - Jiacheng Huang
  - Paulina Vergara Buitrago
  - Jong Won Lee
  - Eun Sun Kyoung

- Group 3
  - Sijin Chen
  - Michael Ofori
  - Jinny Zhang
  - Dongwook Kim
- Group 4
  - Raj Wahlquist
  - Nicole Marie Klevanskaya
  - Wenhui Cheng
  - Rita Rongwei Tang
- Mixed background and coding skills
- Group members who are confident in their coding skills, please help other members during the afternoon coding labs

#### Day 1 – Welcome and Get Ready

- Morning
  - Solomon Messing
- Afternoon
  - Lab Get Started with R/Python

#### Day 2 – Text (Basic)

- Morning: Text (Basic: Dictionary and Classification)
  - Nicole Marie Klevanskaya
  - Raj Wahlquist
  - Sijin Chen
- Afternoon: Lab Text (Basic)
  - LIWC
  - Sentiment
  - Moral Foundations
  - Google Perspective

#### Day 3 – Text (Advanced)

- Morning: Text (Advanced: API, Topic Modeling, Embedding, and Innovative Use)
  - Jialu Fan
  - Jiacheng Huang
  - Michael Ofori
- Afternoon: Lab Text (Advanced)
  - Google Perspective
  - Topic Modeling and Innovative Use

#### Day 4 – Networks

- Morning: Networks
  - Eunsun Kyoung
  - Dongwook Kim
  - Rita Tang
- Afternoon: Lab Network
  - What Networks Could Be
  - Semantic Networks
  - Social Networks
  - Visualization
  - YouTube API

# Day 5 – The Web, Computational Infrastructure, and Innovative Datasets

- Morning: Lecture
  - Jikai Sun
  - Jong Won Lee
  - Shreepriya Dogra
- Afternoon: Lab
  - Web Scraping
  - Reddit API
  - YouTube API
  - TikTok API

### Day 6 – Image/Audio/Video

- Morning:
  - Yingdan Lu
- Afternoon: Lab
  - Athec
  - Face++

#### Day 7 – Looking Ahead and LLM

- Morning: Lecture
  - Gretchen Corcoran
  - Paulina Vergara
  - Jinny Zhang
- Afternoon: Lab
  - Jiacheng Huang leading the lab on LLM

#### **Lab Preview**

- Get Started with R/Python
- Debug
- Install Add-On