
COMM 160DS: Data Science in Communication

Yibei Chen

Week 1 P1

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Welcome and Course Overview

Data Science in Communication

Data Science in the Era of ChatGPT

Welcome and Course Overview

Yibei Chen (she/her)

GitHub: [@yibeichan](#)

[Google Summer of Code](#) (GSoC) contributor: [Pydra](#)

[ReproNim Fellow](#)

Experiences (Python):

- Text analysis (sentiment analysis, topic modeling, word embedding, Large Language Models)
- Network analysis (social (media) network)
- Computational modeling (agent-based modeling)
- Computational neuroscience

Pydra 



Welcome and Course Overview

Pre-course survey

Welcome and Course Overview

Learning Objectives:

- How to **think** as a Data Scientist
- How to conduct work in a **Reproducible** way
- How to **use** Python packages not to develop packages/algorithms
- How to **apply** learned skills to real world data

Read [Syllabus/README](#) (actively being updated)

Dedication + Persistence

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Course Grades Breakdown:

Weekly Assignments (45%, done by Week 7)

- GitHub Classroom
- Datacamp

Class participation (20%)

- In-class coding activities (not a quiz)

Final project (35%)

- Group project (3-5 people per group)

No extra credit

Join a Study Group

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Course Communication:

- Nectir (link on Canvas, HIGHLY encouraged)
 - Open source/science, Open discussion
- Email (etiquette)
 - [COMM160DS] your email subject
 - Clear tell me who you are, what kind of help you need
 - Allow me 24-48h to reply
- Office hours
 - Thus after class - 4:00 pm, SSMS # 4111
 - Zoom available by appointment (during OH)

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What I do:

- Explain course concepts
- Help making study plans
- Help with ideas to problem-solving not answers/solutions
- Brainstorm final project ideas

What I DON'T do:

- Debug (Google + chaptgpt + Nectir)
- Check/Proofread your code (Nectir/study group)

Welcome and Course Overview

Tools:

- JupyterHub
- GitHub (Git)
- GitHub Classroom
- DataCamp

Importance of Data Science in COMM

- Analyze all sorts of human communication aspects, like how people interact on social media, how audiences behave, and how communication campaigns impact people
- Study trends on social media platforms, understand the ins and outs of online communities, and even look into how information and misinformation spread during important events like elections or public health crises
- Public policy, communication strategy, media practices

Importance of Data Science in COMM

- Career opportunities
 - Digital marketing
 - Public relations
 - Media analytics
 - Social media management

Data Science in the Era of ChatGPT

- ChatGPT can generate biased or incorrect answers (not perfect)
- Critical thinking skills
 - Understand data
 - Interpret data
 - Ideals to perform better analysis
- Python