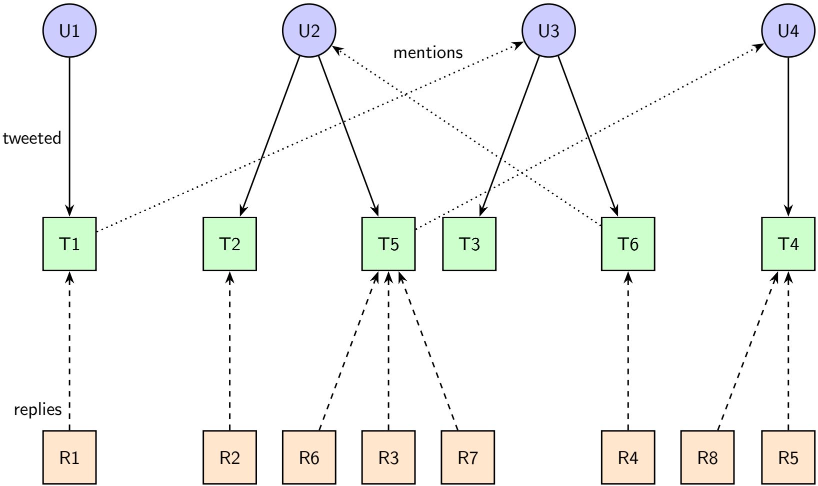
Climate Web

Investigating Links in Climate Change Communication

Katharina Prasse & Margret Keuper

Chair of Machine Learning, Data and Web Science Group
University of Mannheim

September 3, 2025


U1
U2
U3
U4
mentions
tweeted
T1
T2
T5
T3
T6
T4
replies
R1
R2
R6
R3
R7
R4
R8
R5

Dataset

Nodes:

- Users (attributes: location, verified, description)
- Tweets (attributes: # likes, tweet text, tweet image)
- Replies (attribute: replies text)

Edges:

- tweeted (user $\rightarrow$ tweet)
- replies (reply $\rightarrow$ tweet)
- mentions (tweet $\rightarrow$ user)

Project Description

Analytical:

- Investigate patterns in user behaviour & tweet reception? E.g. length of text, number of likes, keywords
- Analyse characteristics of high-interaction tweets vs low-interaction tweets

Conceptual:

- What additional data should be added to the graph (nodes, edges, attributes)?
- What additional research questions are interesting to investigate?

Practical:

- Prepare additional attributes for the graph
- Extend the graph

What to Expect

Structure:

- Bi-weekly meetings
- Project proposal with clear goals and timeline
- Report in a conference format

Learning Goals:

- Detect patterns in social network graphs
- Work with large scale & real world data
- Get to know neo4j

Organizational Details.

Language	English
Duration	1 semester
MMDS & Social Data Science	Welcome
Participants	2-6
Online Attendance	Possible, in person preferred

Questions?

- katharina.prasse@uni-mannheim.de
- keuper@uni-mannheim.de