



Social Network Analysis for Computer Scientists

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<https://liacs.leidenuniv.nl/~takesfw/SNACS>

Lecture 2.5 — Course project

Course project

Course project

- Project on specific SNA subtopic, 60% of your course grade
- Teams of exactly 2 students
- Starting point is a recent paper on a particular algorithm or approach in network analysis
- Deliverables:
 - **Presentation** on a topic-related paper. ≤ 20 minutes for your talk, ≈ 10 minutes for questions and discussion
 - **Paper** presenting a **contribution** to SNA that goes beyond what is done in the paper you study
 - Short peer review document (during peer review session)
 - Relevant project code and supplementary material
 - Bonus for open-source or open science contributions
- Topics divided over teams based on first come, first serve

Course project goal

- Study a specific SNA subtopic
- Provide a (modest) **contribution** to SNA that goes beyond what is done in the paper you study, e.g.:
 - Comparing similar algorithms from different papers
 - Testing the algorithm(s) on larger datasets
 - Validating algorithms using different metrics
 - Addressing future work posed in the paper
 - Replicate the study using more extensive parameter testing
- Project typically requires:
 - 1 thinking/design
 - 2 implementation/programming
 - 3 experimentation
 - 4 writing

(likely partially iteratively)

Presentation

- Present
 - **the assigned paper** on the topic of your project
 - **your contribution** (what you present here depends on progress)
- Convey the main message of the paper in an understandable way
- Show a nice demo, pictures, movies or visualization
- Have a clearly structured presentation
- Briefly discuss your project plans
- Demo presentation will follow
- Discussion with (and engagement of) other students is expected (from both presenters and attendees)

Course project

- Read your paper, understand the main problem
- Do a bit of research on related literature
- Determine which algorithms/techniques/parameters/datasets/subproblems you are going to compare (i.e., your contribution)
- Program (or obtain code of) the different algorithms and techniques
- Obtain and describe applicable datasets for comparing the algorithms
- Perform and report on experiments to compare the algorithms
- Determine and discuss results
- Write a sensible conclusion

Course project paper

- Scientific paper
- \LaTeX
- 6 to 10 pages, two columns
- Images, figures, graphs, diagrams, tables, references, ...
- Between 5 and 9 sections
- Peer review and code review
- Option for “intermediary paper check” before final hand-in

Common pitfalls/excuses

- Only starting to read your paper after Assignment 2 (you are late)
- Starting just before the first paper deadline (you are very late)
- Starting writing only just before first review (your paper will likely be too meager)
- Starting writing code only just before (your algorithms will be slow, you do not have enough time to run your experiments, you claim it is “because everyone is using the servers”)
- Copying from the internet
- A presentation without pictures
- Literally reading out every sentence on your slides
- Too much text on your slides
- Not writing the paper in \LaTeX

Course project schedule

- See website