Tips for Reading Papers

Video: "How to read papers"

https://www.youtube.com/watch?v=733m6qBH-jI

- usefull for papers, GitHub/Medium posts
- read 15 - 20 papers for basic understanding
- do multiple passes:
  1. Title + Abstract + Figures
  2. Intro + Conclusion + Figures + skim rest (skim related work)
  3. Read all but skip math
  4. Read the whole thing but skip parts that don't make sense
- try to answer the following:
  - What did the authors try to accomplish?
  - What were the key elements of the approach?
  - What parts can you use yourself?
  - What other references do you want to follow?

Beispiel Summary

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/31ce112a-9966-42ac-8df7-1157fd26b7ea/How_to_summarize_papers.pdf

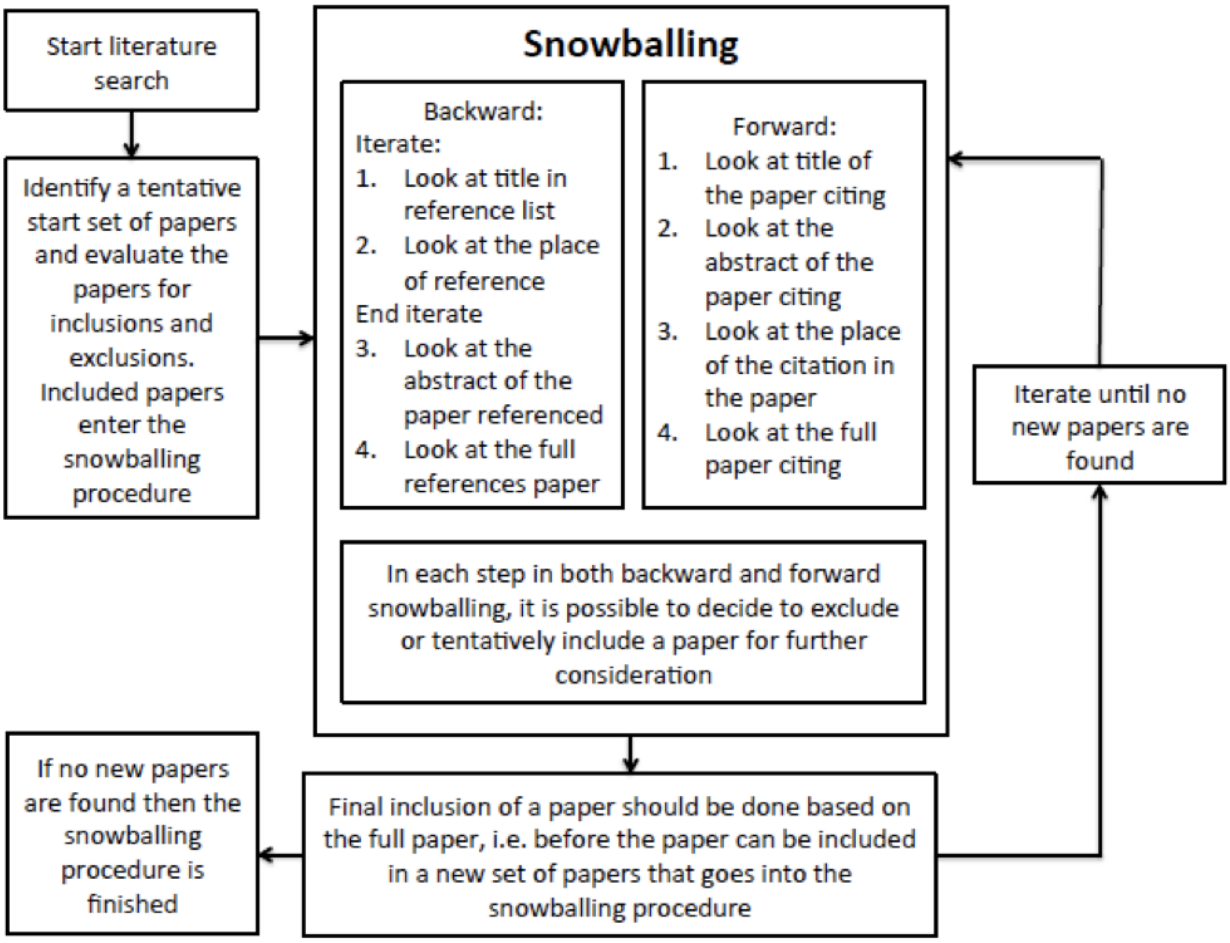
Seminarfolien (11, 12)

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/7c1a2482-b060-4213-a4f3-aa53c7d1efca/Kick-Off-Seminar-Sommer2020.pptx

Snowballing Technique

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/053f05af-30b5-4f4e-82f2-714c8d890c60/ease14.pdf

- snowballing = using the reference list of a paper or the citations to identify additional papers



▼ Procedure

1. Start Set
    - include relevant papers from different independent clusters
    - not too few papers in the start set but also not to general
    - include different publishers, years, authors → diversity
    - create start set by selecting papers matching keywords while also taking synonyms into account
2. Iterations
    - include new paper in set only if it has been examined so that there is no wrongful snowballing

    1. Backward Snowballing

- use reference list of current paper to identify new papers to include

1. exclude unnecessary papers & remove papers that have already been examined on earlier iterations
2. for the real candidates examine reference list:
    - Title – Is it tentatively a paper to include?
    - Publication venue – Is it published in a place where relevant papers may be published?
    - Authors – Do we know that the authors have published relevant paper in the area studied before?
3. Where and how was the paper referenced?
4. Read abstract, other parts and make a decision if it should be included or not

2. Forward Snowballing
    - identify new papers based on those papers citing the current paper

    1. Examine each candidate citing the paper based on Google Scholar info
    2. Read abstract, the place citing the current paper

3. Inclusion and Exclusion
    - only papers found through included papers should be used in the analysis
    - after backward and forward iteration, new papers identified are put into a pile to go in the next iteration
    - only do one iteration at the time
