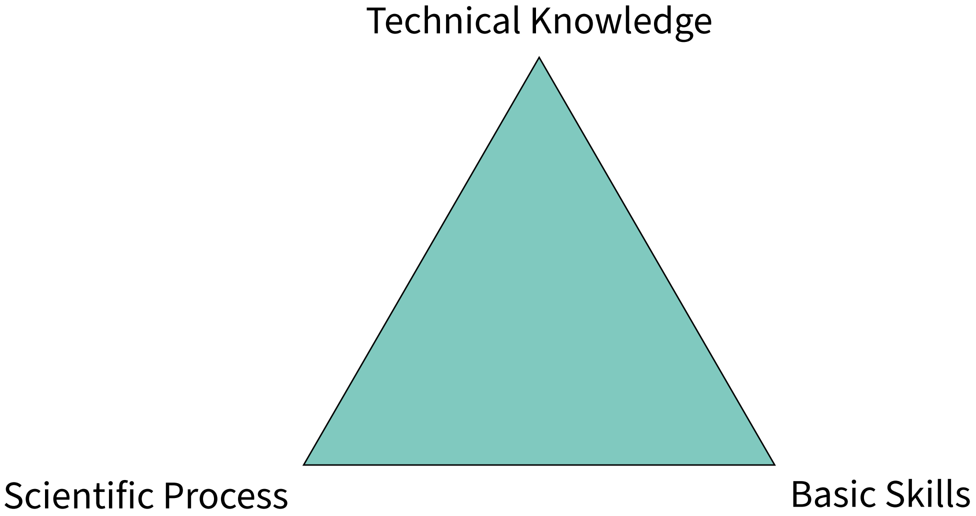
Karlsruhe Institute of Technology

Privacy und Technischer Datenschutz
Seminar WS2023/24
Basic Skills

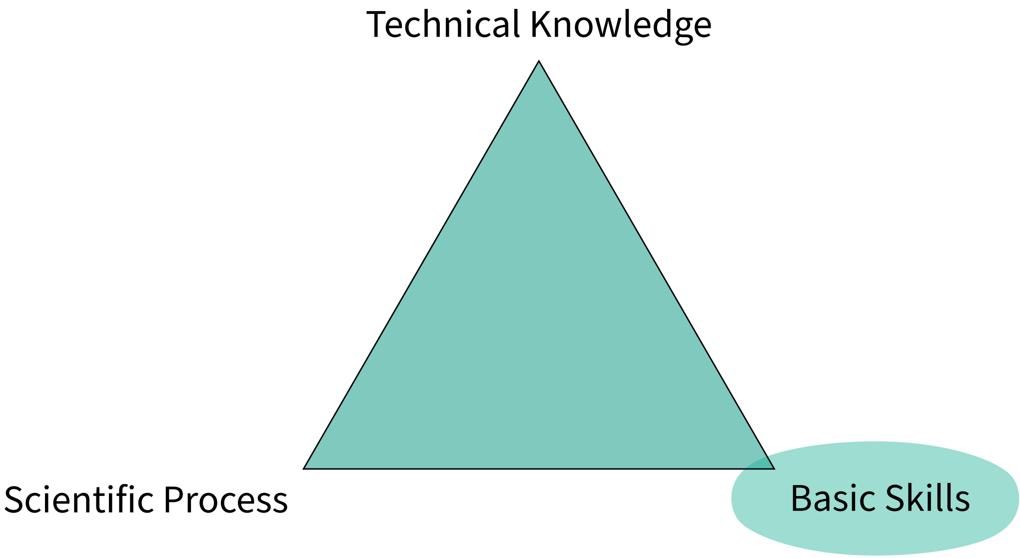
Patricia Guerra-Balboa

November 2, 2023

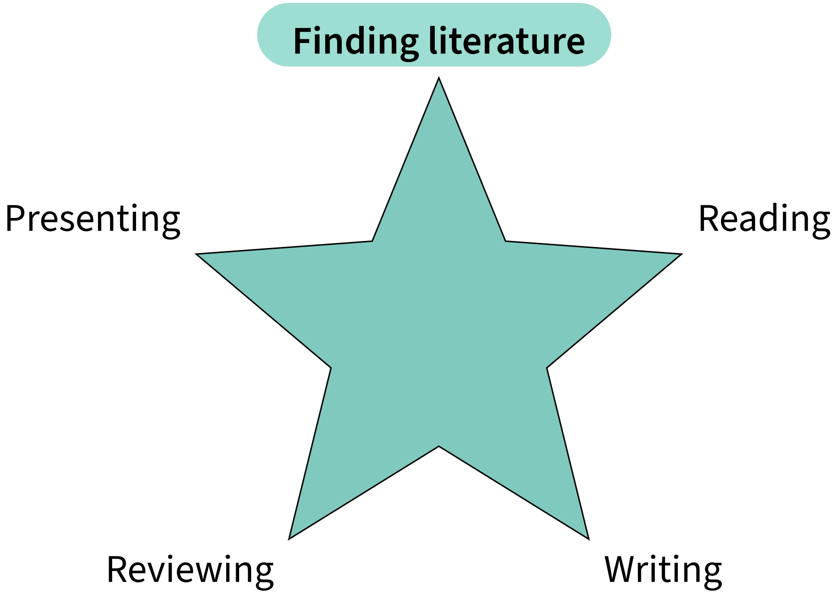
Seminar goals



Seminar goals



Skills


Finding literature
Presenting
Reading
Reviewing
Writing

Finding literature

- Conferences/publication sites
- Search engines
  - Google Scholar
  - Springer
  - IEEE Xplore
  - DPBL
  - Citeseer
- arXiv

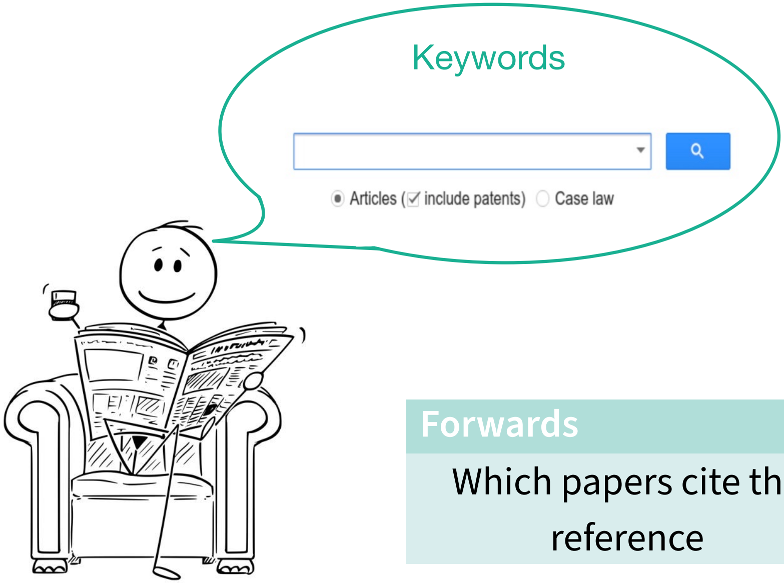
Search Techniques

Backwards
Which papers are cited in the reference

Figure 1: The reference you are currently reading

Forwards
Which papers cite the reference

Search Techniques



Backwards

Which papers are cited in the reference

Forwards

Which papers cite the reference

Figure 1: The reference you are currently reading

Finding literature

Selection

Check skim paper

- Area of research
- Assumptions, system vs. evaluation,. . .

1. Title
2. Abstract
3. Conclusion
4. Introduction
5. Everything else (as needed)

Check conference quality

- Ranking systems:
  - Core: A*, A, B, C
  - (http://portal.core.edu.au/conf-ranks/)
  - ERA, Qualis,...
- Number of citations
- Year of publication

Top Conferences

- **(Practical) IT-Security:**
  - A* IEEE S&P (Security and Privacy)
    Usenix NDSS (Network and Distributed System Security) Usenix Security
    ACM CCS (Computer and Communications Security)
  - A : AsiaCCS, ESORICS, ...
- **Privacy:**
  - A PETS (Privacy Enhancing Technologies Symposium)
- **Cryptography:**
  - A* Crypto (Advances in Cryptology) EuroCrypt (Int. Conf. on the Theory and Application of Cryptographic Techniques)
  - A TCC, AsiaCrypt, FC,...

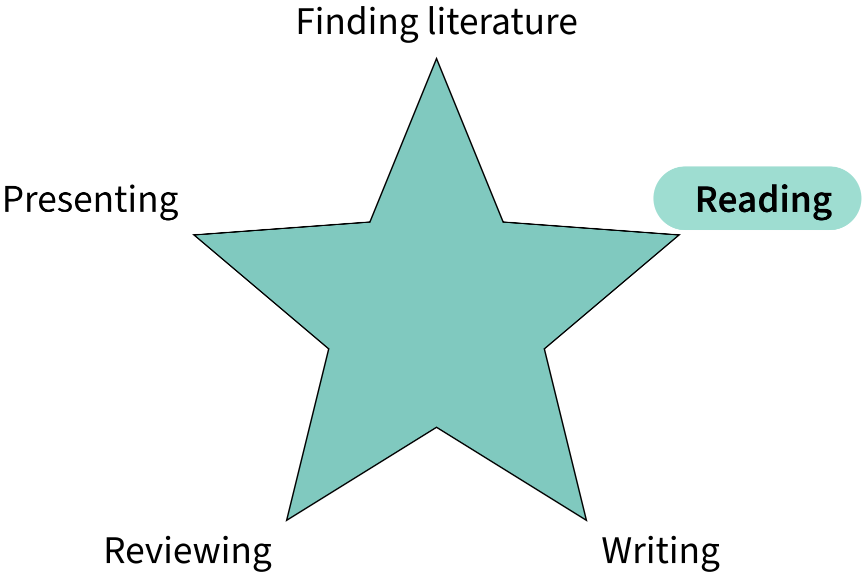
Keep it organized

Reference management software
Zotero, Citavi,. . .

Tip:
author+year+first_word

Example:
Dwork2014algorithmic

Skills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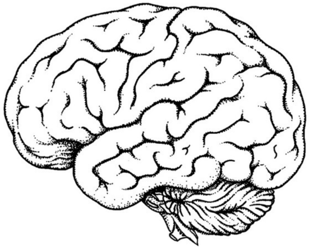
Before Reading



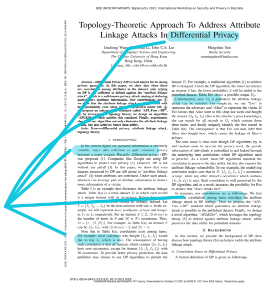
Activate knowledge

Guiding questions

Techniques

1. Title
2. Abstract
3. Conclusion
4. Introduction
5. Everything else (as needed)

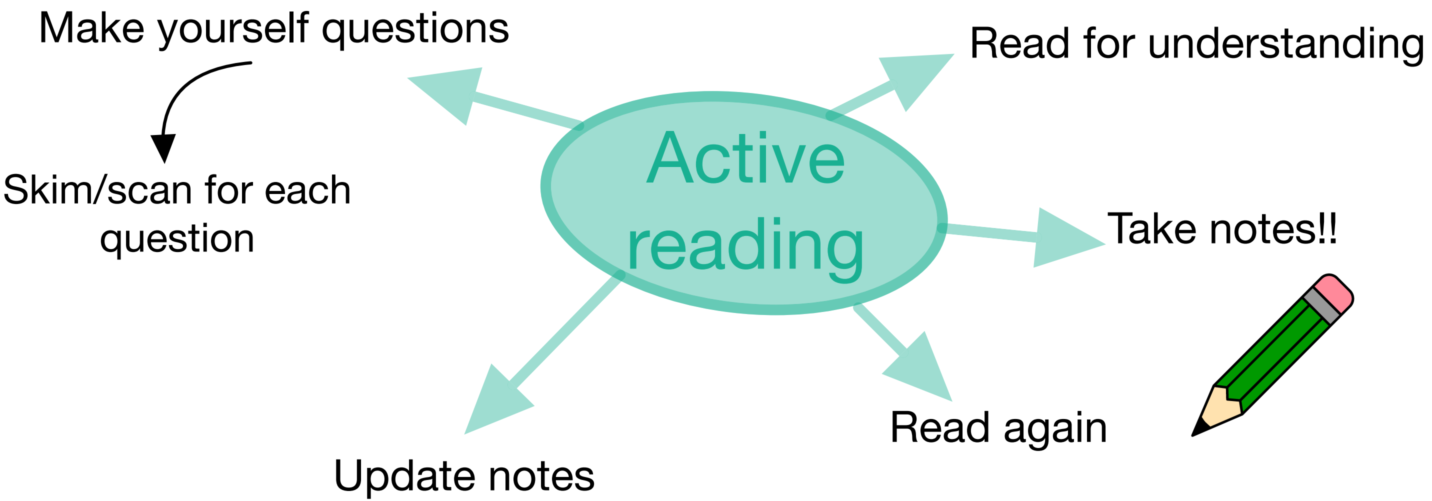
skimmming trough



scanning

focused reading

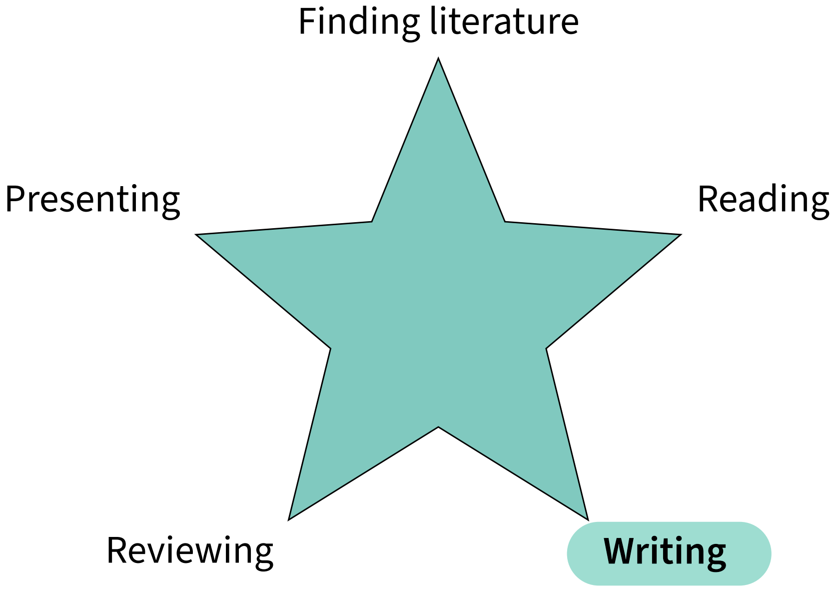
Possible reading strategy



Further material on reading

- **“How to read a paper” by S. Keshav”**
  http://blizzard.cs.uwaterloo.ca/keshav/home/Papers/data/07/ paper-reading.pdf
- **“About academic reading”**
  https://aso-resources.une.edu.au/academic-reading/about- academic-reading/

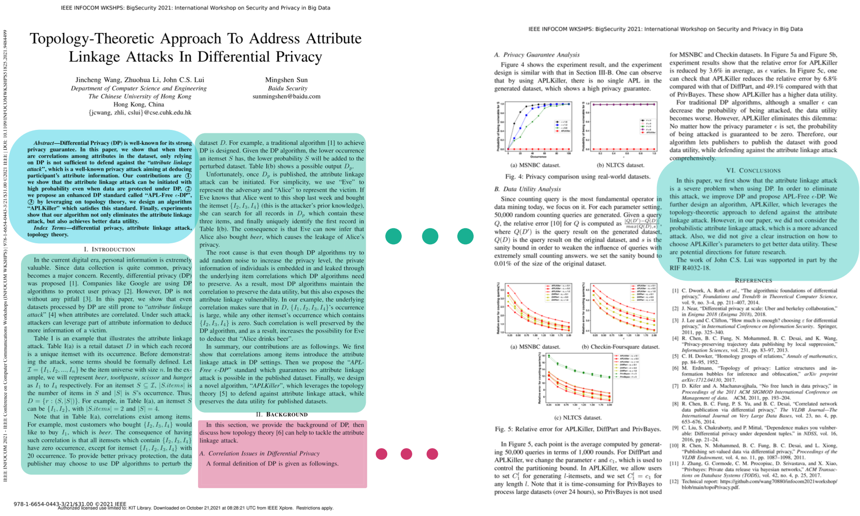
Skills



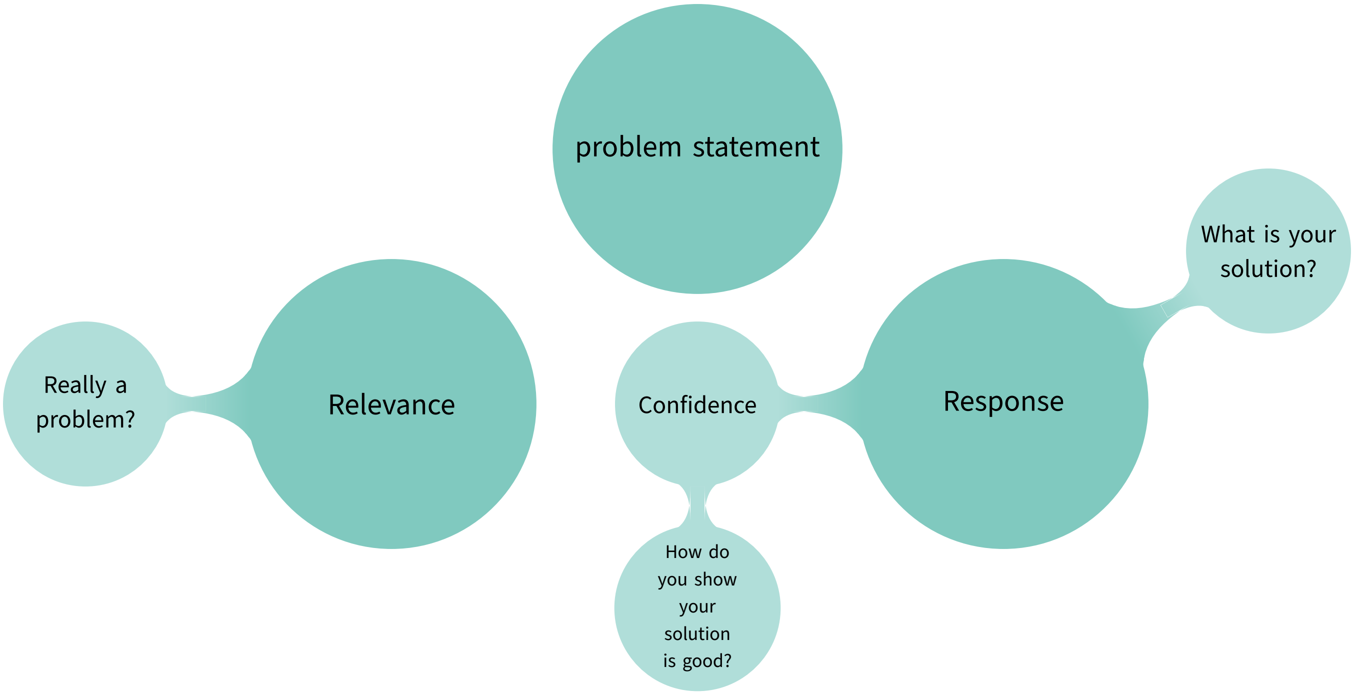
Finding literature
Presenting
Reading
Reviewing
Writing

Structure

0. Abstract
1. Introduction
2. Related work
3. Background
4. Main part
5. Conclusion & Future Work



Abstract

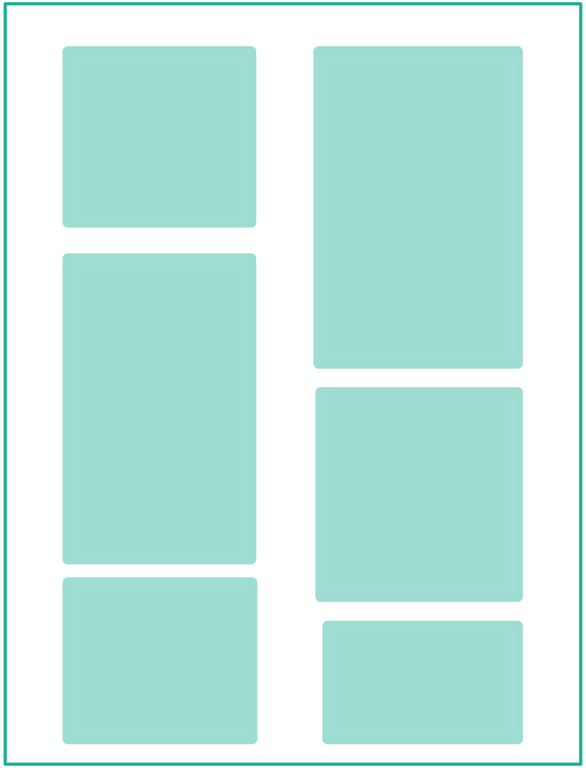

problem statement
What is your solution?
Really a problem?
Relevance
Confidence
Response
How do you show your solution is good?

Introduction

Broad topic
& motivation

Specif topic
&
open problem

Goal
&
research question

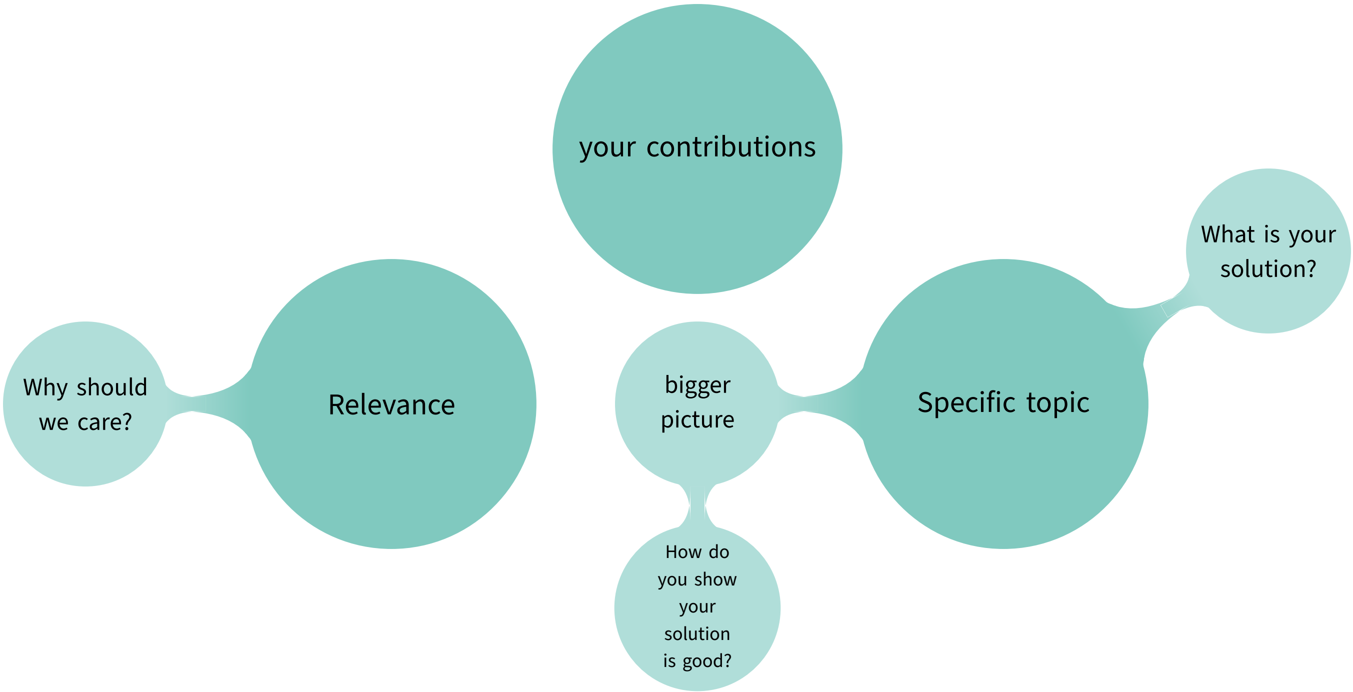


Scientific motivation
&
relevance

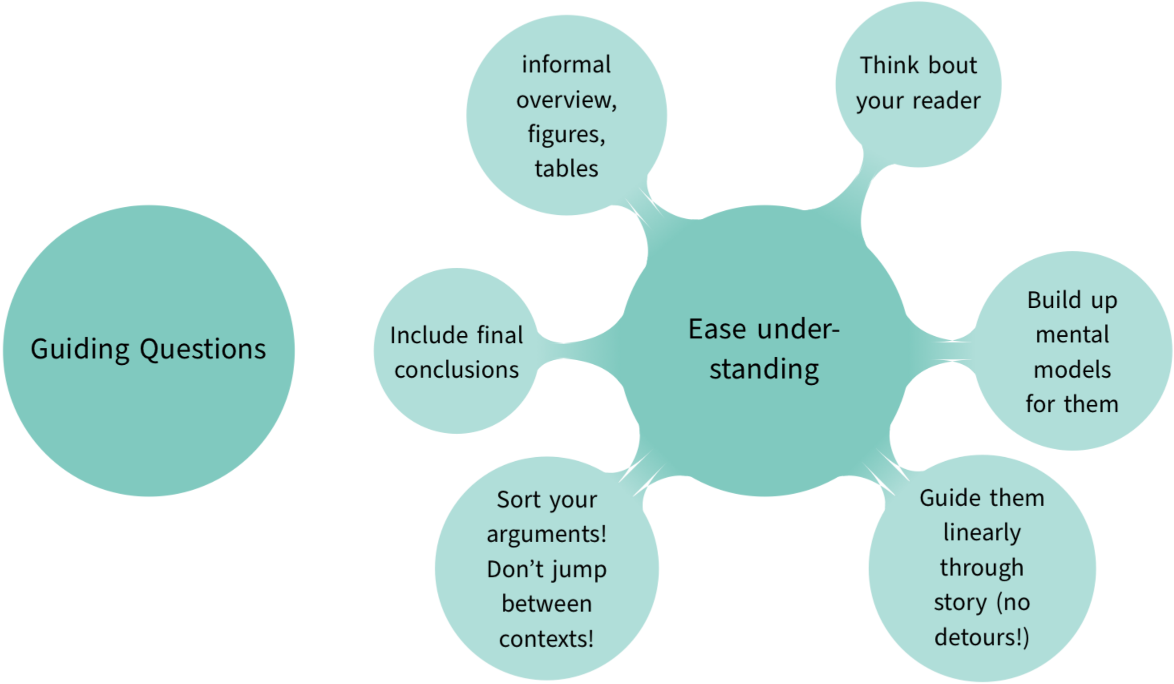
Your contributions

Reader's
digest

Conclusion


your contributions
Why should we care?
Relevance
bigger picture
Specific topic
What is your solution?
How do you show your solution is good?

main part


Guiding Questions
Ease under-standing
informal overview, figures, tables
Think bout your reader
Include final conclusions
Build up mental models for them
Sort your arguments! Don't jump between contexts!
Guide them linearly through story (no detours!)

Writing style

Basics: Grammar, spellcheck ...

Scope:

- Sentence $\leftrightarrow$ statement
- Paragraph $\leftrightarrow$ idea
- Section $\leftrightarrow$ subtopic

KEEP IT SIMPLE!

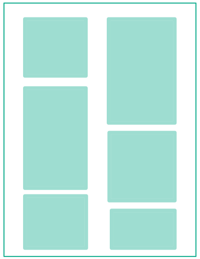
- Short, precise sentences
- Active $>$ passive
- Avoid negations
- Old $\rightarrow$ new

Plagiarism

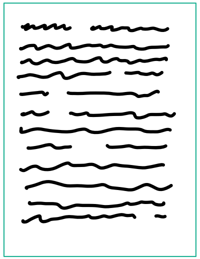
- Paraphrase: own words
  - Close your literature
- Signal:
  - Own content
  - Summary of someone else’s
  - Direct quote

How I approach it

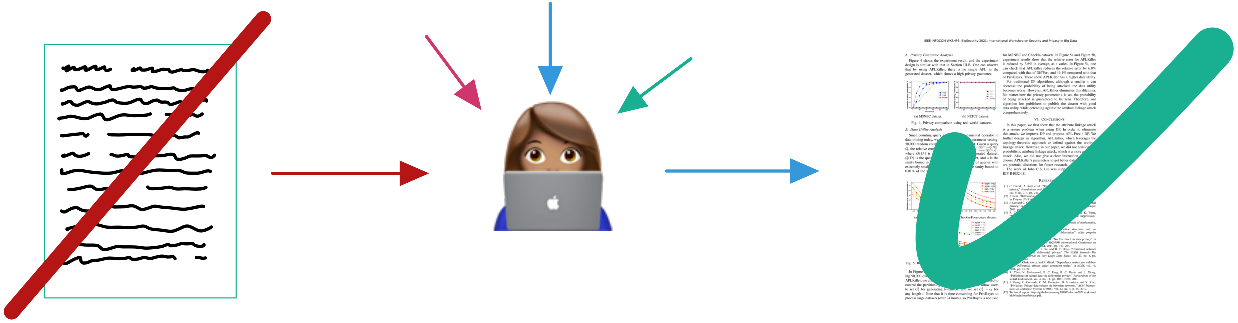
Rough plan



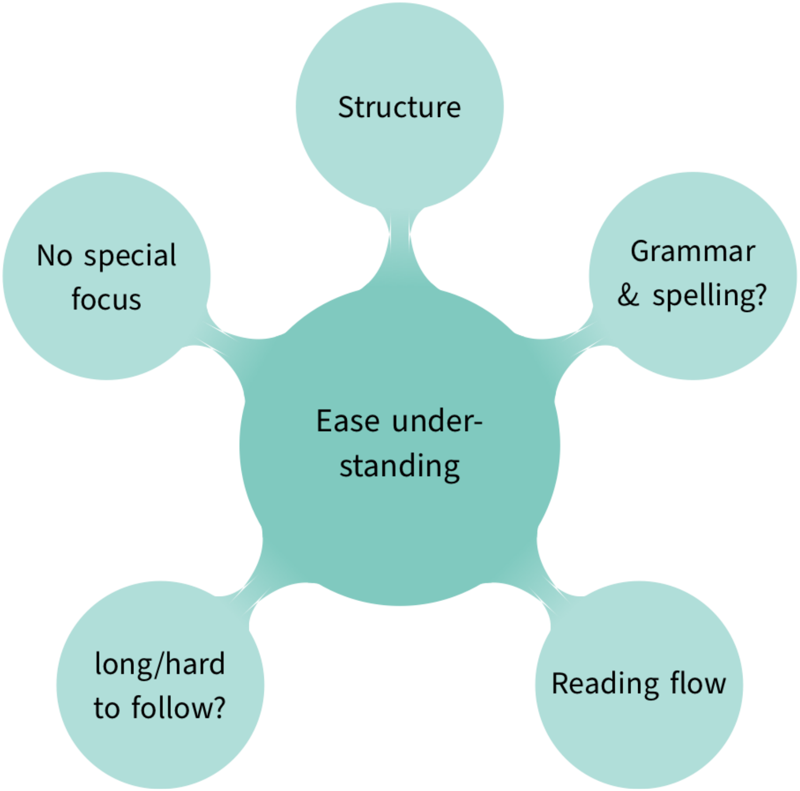
Structure



First draft



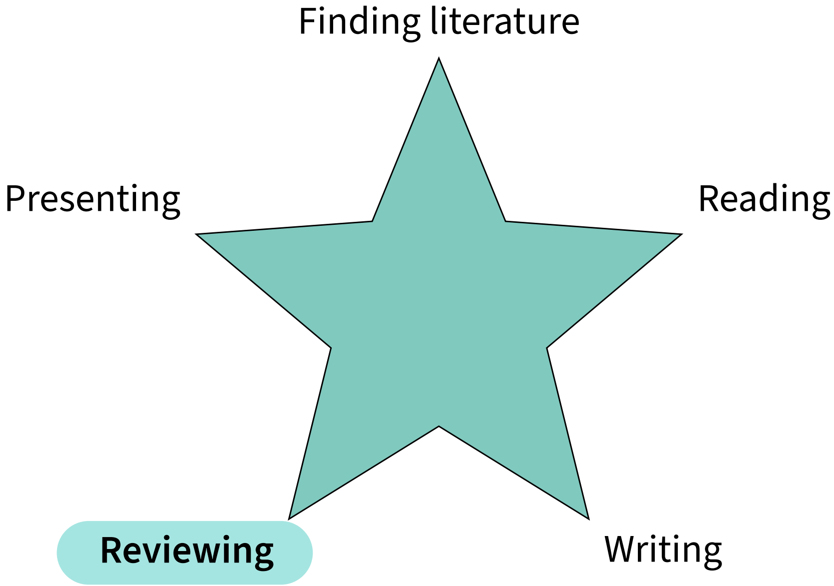
Varying focus



Further material on writing

- **“The Elements of Style” by Strunk and White**
  https://faculty.washington.edu/heagerty/Courses/b572/public/StrunkWhite.pdf
- **How to Write Papers So People Can Read Them:**
  https://www.youtube.com/watch?v=L_6xoMjFr70
- **Plagiarism:**
  http://www.ou.edu/content/dam/integrity/docs/nine_things_you_should_know.pdf

Skills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Why peer-reviewing?

Goal 1

improve work

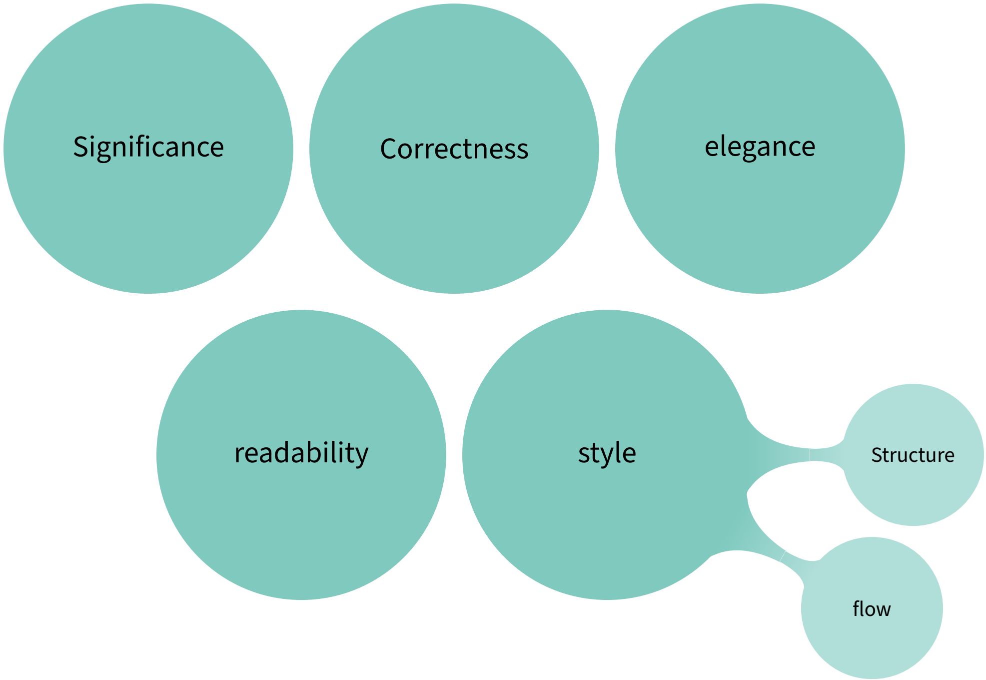
Goal 2

filter mechanism

Final goal

Ensure quality of publications

Quality criteria



A good review

- Thorough, critical
- Follows given structure
- Objective, polite
- Helpful, con-structive, specific
- anonymous

Review Structure

- 3 Strengths & 3 Weaknesses
- Scale 1 – 5: each part of the paper:
  - Structure
  - Argumentation
  - Readability
  - Language
  - Grammar
  - Formatting
  - Citation Style
- Overall ranking (accept (strong/weak), reject(strong/weak))

Opportunity: Receiving Reviews

Take your time for
every point

Harsh/wrong/
unfounded critics

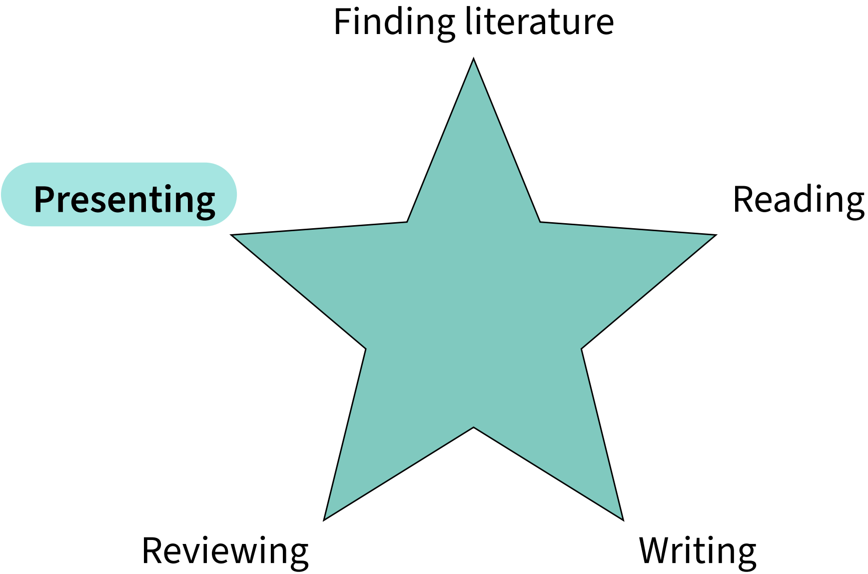
- Limited time
- Learns what has been misunderstood

Open your mind

Further material on Reviews

- **“The Task of the Referee”** by Alan Jay Smith:
  https://www.cs.utexas.edu/users/mckinley/notes/reviewing-smith.pdf
- **“A Guide for New Referees in Theoretical Computer Science”** by Ian Parberry
  https://basics.sjtu.edu.cn/links/guide_referees.pdf

Skills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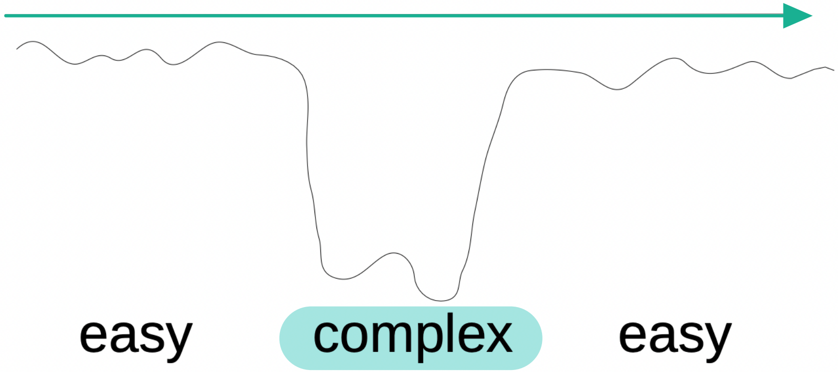
Purpose first!

PERSUADE

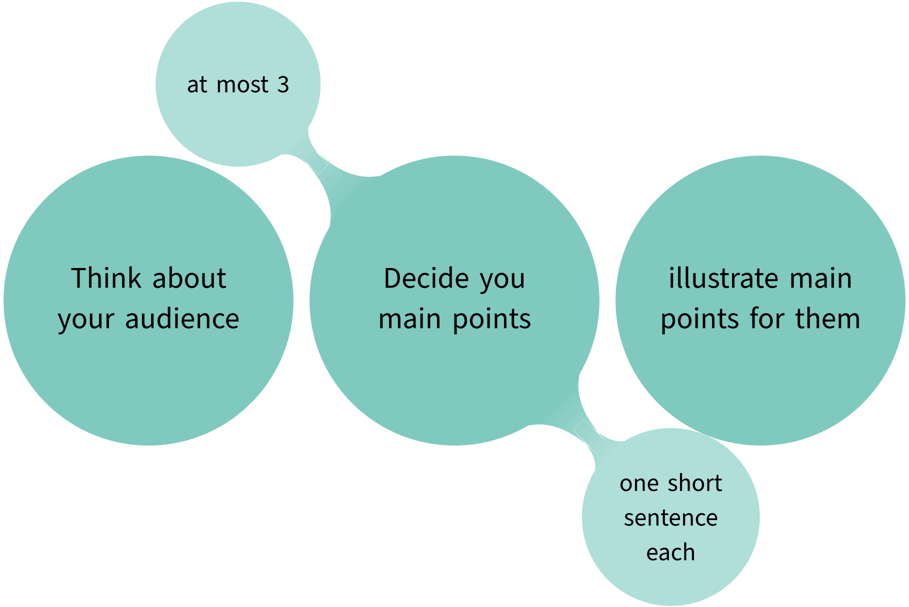
INFORM

ENTERTAIN

The grebe strategy

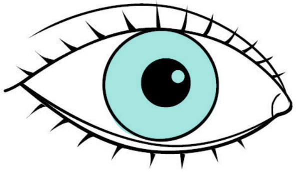


building the presentation strategy



The basics

hear

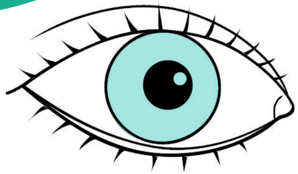


look

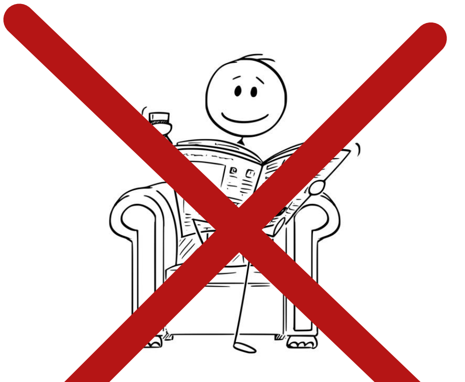
DO NOT READ

The basics

hear



look

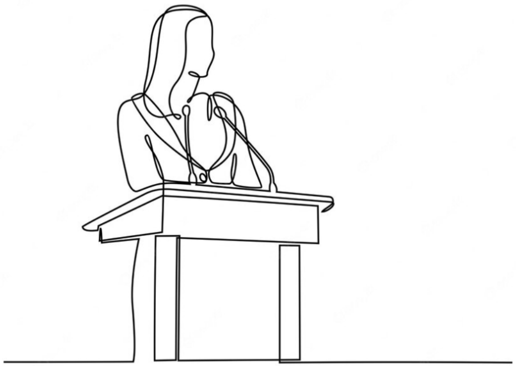


DO NOT READ

Figures ↑↑ Vs. Text ↓↓

The basics

- Do not read!
- Look to the people
- Use your body language
- Change your voice



The basics

- Do not read!
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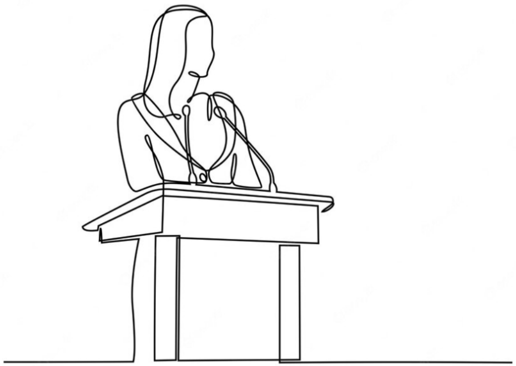
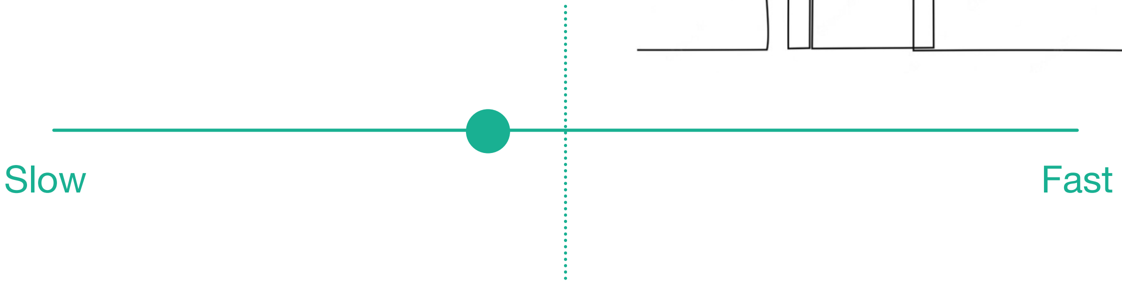




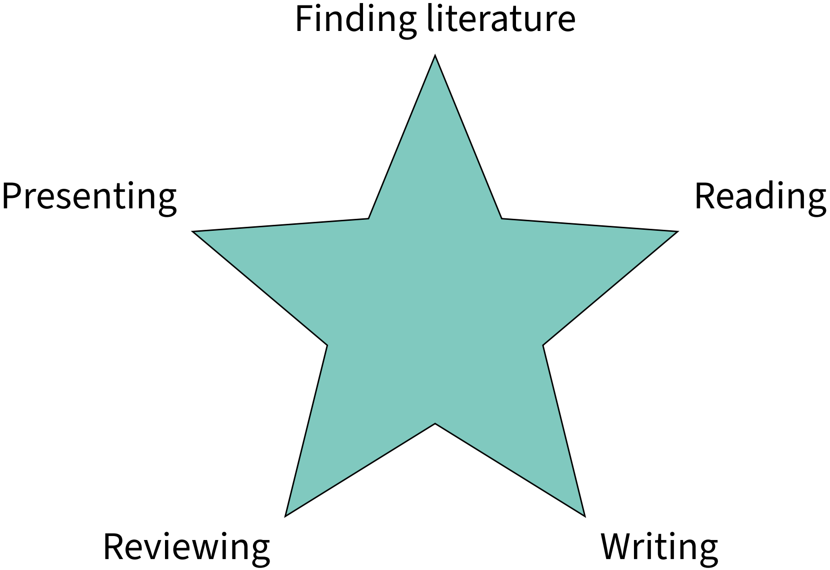
Not To Do List

- Not signaling own/other’s contributions
- Finish after 2/3 of the allowed time
- Go 1/3 over time
- Include everything - all the details!
- Cover every part, but give no details at all (No depth)
- Only cover a tiny part of your work (No breadth)

Further material on presenting

- **“How to avoid death By PowerPoint”**by David JP Phillips:
  `https://www.youtube.com/watch?v=Iwpi1Lm6dFo`
- **“PowerSpeak”** by Dorothy Leeds

Good luck!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