HowTo read a scientific article
Computational Pangenomics – Summer 2020

Tizian Schulz

April 29 2020

Copy Right Notes

This presentation and all following material on scientific writing is based on previous material of Roland Wittler and has been extended and edited by myself.

As a reference on scientific writing, the book *Writing for Computer Science* by Justin Zobel has been used.

Background

Journal article vs. conference proceedings

- timing
  journal: no deadline $\rightarrow$ published when ready
  conf.: deadline $\rightarrow$ submitted when due, published during conference

- review process
  journal: thorough, iterations/revisions
  conf.: accepted or rejected

- consequence
  journal: later but more ripened
  conf.: quicker but sometimes more sloppy

$\rightarrow$ Conference version often followed by journal version.

Background

Further publication types

- review articles
- application notes
- book chapters
- short abstracts
- posters

Background

Instructions to the authors

- page limits
- specifications on formating, structure, etc.
- re-formatting by journal

$\rightarrow$ Do not always blame the author!

Accessibility

- open access (OA): pure OA journals, optional OA (subject to charge), no OA
- institutional access: universities/institutes pay for "flat rates" for some publishers $\rightarrow$ Use university WiFi (or VPN) to access papers.
- some papers are linked on authors' websites etc.
- Google Scholar

Background

How to get aware of papers

- referenced by other paper
- referencing your own paper
- conference
- eTOC newsletter (electr. table of contents)
- article alerts
- blogs, twitter, etc.
- seminars, lectures, journal clubs
- browsing favorite journals
- literature reviewing to get into a topic

How to read a paper

Depending on why/how deeply you read a paper.
If you want to understand a paper thoroughly:

1. try to understand the abstract
2. do understand the introduction
3. try to understand the background
4. do understand the abstract
5. try to understand the conclusions
6. did you get the story/selling point?
7. read everything