Seminar: Turing Award Winners and Their Contributions
4. How to Write a (Seminar) Peer Review?
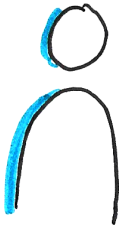
Malte Helmert, Augusto Blaas Corrêa and Florian Pommerening
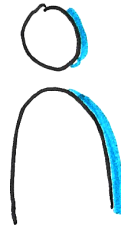
University of Basel

September 17, 2020

Let's Go!

Let's Go!
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Aspects of a Review
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Next Steps
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Goals

Review Author (You)

- practice critical reading
- improve your own writing
- practice giving feedback
- learn something new

Report Author

- gets feedback
- improves writing
- improves structure
- improves grade

Let's Go!
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Aspects of a Review
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Next Steps
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Get Familiar with the Report

- skim the report first
- then read the report thoroughly
- take notes while reading
    - which parts are unclear?
    - where did you get lost?
    - any gaps or missing pieces?
    - less important: typos

Let's Go!
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Aspects of a Review
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Next Steps
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Properties of Good Reviews

write the review you want to receive

- plan enough time for reading/writing
- submit on time
- be constructive
- be detailed and specific
- justify arguments with examples
- be honest but polite
- also highlight things you liked

Let's Go!
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Aspects of a Review
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Next Steps
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Aspects of a Review

Let's Go!
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Aspects of a Review
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Next Steps
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Aspects of a Review

- focus on different aspects
    - Summary
    - Soundness
    - Clarity
    - Scholarship
    - (Relevance/Significance)
    - (Novelty)
    - Minor Comments
- consider them independently
- not a fixed structure
    ⤳ discuss more or fewer aspects if it makes sense

Let's Go!
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Aspects of a Review
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Next Steps
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Summary

Content

- (very) short summary of the report
- use your own words

- demonstrates that you understood the text
- shows author how text was received
    - main points clear?
    - focus as intended?
    - story/structure clear?

Let's Go!
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Aspects of a Review
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Next Steps
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Soundness

Content

- Is the formal background complete and consistent?
- Are the main arguments supported sufficiently?
- Are the proofs correct?

- not only formal proofs but also argumentation
- consider the details but don't be too picky
    - small errors go under "Minor Comments"

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Aspects of a Review
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Next Steps
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Clarity

Content

- How well written is the report?
- Is the structure easy to follow?
- Is it easy to read?

- not about spelling mistakes, etc.
  - ⇝ "Minor Comments"
    - unless there is tons of them
    - spell-check your report before submission!
- point out bad style
  - but realize that styles other than yours can be good
- be constructive and not aggressive

Scholarship

Content

- Is related work sufficiently cited and discussed?
- Are the references complete and in good shape?

- Recommend additional sources if you know something
  the author missed
- Check the bibliography as well
  - bibtex entries copied from Google Scholar are often incomplete

Let's Go!
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Aspects of a Review
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Next Steps
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Relevance/Significance

Content

- How good does this fit with the conference/journal?
- How much of an impact will the results probably make?

- used to keep a conference/journal theme
- identify high-impact work
- not that applicable for our seminar

Let's Go!
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Aspects of a Review
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Next Steps
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Novelty

Content

- Is the presented work revolutionary or incremental?

- used to assess the amount of the contribution in a submission
- not that applicable for our seminar

Let's Go!
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Aspects of a Review
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Next Steps
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Minor Comments

Content

- catch-all group for other comments
- typos, spelling, grammar, style, . . .

- unrelated to main message of the review
- make suggestions easy to address
  - page numbers and sentence context
- be specific and constructive
- you can include an annotated version of the text for this

Let's Go!
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Aspects of a Review
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Next Steps
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Next Steps

How to Receive a Peer Review

When you receive a review

- be gracious even if you disagree
    - someone took the time to read your work
    - and give you feedback

- fix the problems

- if the reviewer misunderstood
    - identify where they got lost
    - improve the section to avoid this misunderstanding

be prepared and willing to make changes

Let's Go!
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Aspects of a Review
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Next Steps
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Further Information

Good example

We uploaded a good example from last year to the course website.

Blog posts about how to write good reviews

https://sites.umiacs.umd.edu/elm/2016/02/01/
mistakes-reviewers-make/
https://plos.org/resource/how-to-write-a-peer-review/
https://www.nature.com/articles/d41586-018-06991-0

Let's Go!
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Next Steps
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Questions