

A reviewer's guide

November 7, 2018

Coffee talk by Jan van Gemert

Reviewing is part of your academic job

"Quality" is primarily guarded by good reviewing

Main goal: Prevent flaws

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Main goal: Prevent flaws in:

- ▶ Hypothesis (sound hypotheses)
- ▶ Literature (relation to others)
- ▶ Method (aligns with hypotheses)
- ▶ Technical (correct equations)
- ▶ Experimental setup (are the hypotheses evaluated)
- ▶ Evaluation (unbiased, fair comparison to others)
- ▶ Clarity (goal: communication)

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It cannot be expected to rerun experiments, a review is inherently based on trust in the author's integrity.

What is a good paper?

Scientific communication:

- ▶ A solid brick that others can build on (something is learned).
- ▶ Well written with intuitive motivation (Fig 1)
- ▶ Clear hypotheses, research questions, contributions.
- ▶ Method aligns well with hypotheses
- ▶ Aware of limitations: Insight into what assumptions are made, and when does this fail.

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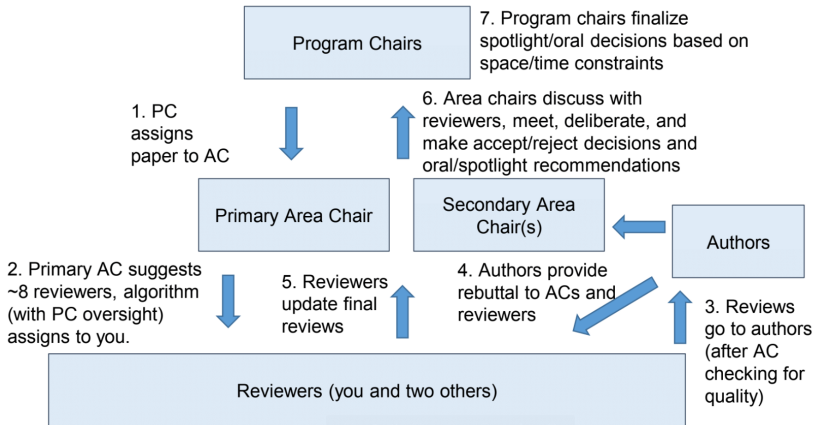
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Empirical validation:

- ▶ Hypotheses, research questions and contributions are backed up by empirical evidence
- ▶ Experiments vary only 1 variable (the hypotheses)
- ▶ Experiments on several datasets to illustrate it generalizes
- ▶ Bold numbers are never a goal in itself, they are 'only' important to show relevance/usefulness.
- ▶ Reproduceable (clear algorithm or better: code)

The (CVPR) decision process



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- ▶ Makes claims without giving details
- ▶ Is only a few lines
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A good review:

- ▶ Constructive author feedback (in addition to What, also How to change)
- ▶ Well motivated, with detailed justification (citations / line numbers)
- ▶ Well written and self-contained (readable without the paper)
- ▶ Eases the decision for the AC

My review structure

Review formats are different for each conference. I always use this layout in a .txt file, which can be poured in any format.

- ▶ Summary (unbiased, the authors should agree with it, introduce terms that you will build on (self-contained))
- ▶ List of positive points (just 1 line)
- ▶ List of negative points (just 1 line)
- ▶ One paragraph of score motivation and how to change, building on pos/negs
- ▶ Comments per line number (detailed justification)

During the first time reading I directly write comments per line, the other points follow from them