

Reviewing Guidelines and Template for AI/ML*

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The aim of this document is to: (a) enlist some good (and not-so-good) practices when reviewing a conference/journal/workshop article and (b) provide a template for reviewing papers in the field of artificial intelligence. The views expressed here are not free of my own biases, but I hope for them to serve as a rough guideline for those who may be new to reviewing. I highly recommend ICLR's reviewing guidelines and Niklas Elmqvist's article for a more detailed overview of good reviewing practices.

Do's and don'ts:

- Do read the paper and understand it to the best of your ability. It is common not to understand certain aspects of a paper. In such cases, try your best to make sense of it, and provide feedback, accounting for your level of understanding of the paper.
- Be respectful and polite, even if the paper is poor/highly sub-standard. Believe that the authors did the best they could with the time, experience, resources and abilities they had at their disposal.
- Avoid vague comments. Eg: Instead of simply stating the paper lacked clarity, state specifically which part of the paper is not clear to you and why. Similarly, instead of simply saying that the paper 'lacks novelty', support your opinion with concrete justifications.
- Be reasonable. Don't expect authors to have compared their results with a baseline that was released say, 10 days ago (I believe the general consensus is that if a baseline is less than 3-4 months old, it is okay for authors not to have compared their method with that baseline). Similarly, try to be understanding of the fact that the authors may not have access to sophisticated computing resources to replicate very expensive baselines that require say, 100s of GPUs to run.
- Although it is hard not to do so, don't look up an anonymous paper's authors prior to reviewing the paper. The paper should be evaluated purely on its own merit. It may not be possible to review a paper fairly if

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you become aware that one or more of the authors is an ‘authority’ on a given topic. In research, the only authority should be good science.

- Don’t leave reviewing to the last minute. Try and complete the reviews several days before the deadline. Give yourself time to edit the review in case your views on certain aspects change.
- Review every comment and ask yourself - ‘If I were the author of this paper, would I be able to view this as a fair comment?’

Reviewing Template:

- Summarize the paper in 2-3 lines highlighting what the paper aims to do, how it does what it claims to do, and how the claims are validated.
- Follow this up with a line or two about the strengths of the paper.
- A few lines about your main concerns regarding the paper.
- Create a sub-heading for ‘Major concerns’ (not more than 3). Enlist (with numbered points) the major concerns in detail. Ask specific questions if needed. Sequence them in decreasing order of importance (most important point should be listed first). Major concerns could include any aspect that brings into question the validity (correctness) and/or claims of the paper.
- Create a sub-heading for ‘Minor concerns’ (as many as you like). Enlist them with numbered points. Minor concerns could include grammatical errors, typos, some aspects that you would like more information on (but does not impede your overall understanding of the paper), missing references, etc., Feel free to make suggestions and recommendations that could help the authors further improve their paper’s quality.