Reviewing papers

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Goal

Reviewing - a public service:

- Conference/journal editors ask researchers from a similar field to review
- Editors aggregate the reviews and make the final decision
Structure of the System

- Every journal has a set of Editors
- Editors choose Referees based on their expertise, ability, and performance
  - Responsibility of a referee: evaluate the assigned paper and submit a formal report to editors.
    - Based on the significance, quality, presentation, relevance (to the conference/journal)
  - Audience of report: editors and authors
- Referees submit the report to editors
- Editors decides whether to accept the paper (based on his/her professional experience and the report)
- Editors report to Managing Editors
- ...
Significance of the problem

- Too old and irrelevant?
- Too general/abstract?
- Too specific (a tiny amount of use cases)?
- Too trivial?
Quality

- Quality of contribution: innovative, not trivial extension of previous results
- Correctness: the principle behind should be correct
  - Expected to spend time in error-detection and correction
- Plagiarism: original work, reference should be cited
Presentation

- Motivation for the problem
- Related work described and cited
- The general idea/approach described
- Question: how succinct should the proofs be?
- Readability: paper structure, grammar
Relevance

- If the paper is relevant to the conference/journal
  - Topic
  - Application
- May recommend to a different conference
Ethics

- Conflict of interest
  - Communicate with Editors if it arises
- Objectivity
  - Avoid personal prejudice
- Confidentiality
  - Cannot use the results, the outcomes, or projected outcomes of the paper
  - Cannot distribute unpublished work
- Timely manner:
  - A significantly long delay can add to other delay in the publication process
Referee's review

- Should include a summary of the paper (for the editor and the referee themselves)
- Detailed and constructive criticism
  - If there are many fatal mistakes, identifying a few is enough
- Non-personal: the author should psychologically be able to accept the feedback
  - no "this paper is trash" or "the author is an idiot"
- Potentially recommend a different conference/journal
- If the referee doesn't review some parts of the paper, this should be noted in the review
Q

What if I am actively working on the problem?
Ideas taken from
