How NOT to review a paper

The tools and techniques of the adversarial reviewer

Graham Cormode
AT&T Labs—Research
Disclaimer

• Many of the following comments can appear in a review

• But they should not be the main reason for rejection (they often can be fixed in a revision)

• Keep those comments in mind as you write, to prevent their use by your future reviewers
Characteristics of the adversarial reviewers

• Irritation at being given a paper to review, even if they accepted the invitation
Characteristics of the adversarial reviewers

• Irritation at being given a paper to review, even if they accepted the invitation

• The belief that it is better to reject ten OK papers than to allow one subpar paper to be accepted
Characteristics of the adversarial reviewers

• Irritation at being given a paper to review, even if they accepted the invitation

• The belief that it is better to reject ten OK papers than to allow one subpar paper to be accepted

• The unwavering certainty that their opinion is correct, and final
Characteristics of the adversarial reviewers

• Irritation at being given a paper to review, even if they accepted the invitation

• The belief that it is better to reject ten OK papers than to allow one subpar paper to be accepted

• The unwavering certainty that their opinion is correct, and final

⚠ Did you ever feel adversarial while reviewing?
Adversarial conditions

• A typical review may be conducted clutching a crumpled and stained printout of the paper while packed into coach class on an intercontinental flight with a small child kicking the seat from behind...
Adversarial conditions

- A typical review may be conducted clutching a crumpled and stained printout of the paper while packed into coach class on an intercontinental flight with a small child kicking the seat from behind...

⚠️ Make sure that you review papers in proper conditions

⚠️ Make sure that your paper is as readable as possible in worst-case settings
Motivation

• The initial reason for rejection may be as vague as gut feeling, or a lack of enthusiasm for the problem or approach taken

• But the reviewer needs to concoct a set of reasons to support the judgment

• Therefore, the adversarial reviewer will seek out every last negative point of the paper to make it seem that there is no hope
The Goldilocks method

• Find an aspect of the paper and complain that it is either « too hot » or « too cold »
The Goldilocks method

• “There are insufficient examples to illustrate what is meant”
  or “There are too many obvious examples which interrupt the flow”

• “Insufficient analysis to justify the interest of the method”
  or “The approach is clearly of theoretical interest only”
The Goldilocks method

• Most satisfying on re-submissions! First complain that proofs are missing, and then complain that the proofs are obvious and could be omitted.

• Can be done in a single review: say that the paper is too long and wordy, yet complain that many important details are missing.
If you can’t say something nasty…

• ... don’t say anything!

• If there are any section for which the adversary reviewer is unable to find anything meaty to complain about, they will simply skip over these in their review
Silent but deadly

• Very low score with minimal comment

• Guarantee extra frustration for the authors as it gives no help in identifying what to improve
Moving the goalposts

• Pick a different problem in roughly the same field
• Decide how you would tackle it
• Berate the authors for not having done so
Moving the goalposts

- Pick a different problem in roughly the same field
- Decide how you would tackle it
- Berate the authors for not having done so

- Vicious variant: pick a problem worked on by the same set of authors, and quote sentences from their papers
Introduction

• Take issue with each claim, and use this as a basis for rejection
• Target subjective statements: scan for all sentences starting with «Interestingly» or «Importantly», and disagree with these
• Or just say that the problem is insufficiently motivated
Introduction

• Take issue with each claim, and use this as a basis for rejection

• Target subjective statements: scan for all sentences starting with « Interestingly » or « Importantly », and disagree with these

• Or just say that the problem is insufficiently motivated

⚠️ Motivate with facts rather than subjective statements
Related work

• Often the most badly written, so plenty for the adversarial reviewer to complain about

• “Reads like a list of vaguely connected papers without any attempt to explain how they relate to the results presented here”
Related work

- Often the most badly written, so plenty for the adversarial reviewer to complain about

- “Reads like a list of vaguely connected papers without any attempt to explain how they relate to the results presented here”

⚠ Always discuss how previous work relates to your work. Use it to highlight your contributions.
Related work

• Say that “many important references are omitted” without suggesting any

• Suggest some papers with absolutely no relation to the submission, and leave the authors scratch their heads

• Make a casual reference to a very prolific researcher, or to a common surname, which could refer to one of hundreds of papers
Related work

• Cast suspicion on an innocent third party by making repeated references to another researcher, so that the authors believe that this person is the adversarial reviewer
Evaluation

• Dismiss synthetic data as being unrealistic
• Dismiss real data as being just a single instance, unrepresentative of “real” real data

• Complain that the datasets are too small

• Complain that the plots are too small to read, affect to suffer from color-blindness
Conclusion

• Disagree with each claim of what was accomplished (« No you didn’t »)

• Respond to any statement of the form “In the future, we will ...” with the simple request “Please don’t”
Throughout the paper

• Methodically highlight every spelling error and typo
• Mix up minor issues and major concerns to disorient readers of the review
• Say that several parts would need revision by a native English speaker
  This is most devastating when all authors are native speakers
• Conclude by saying that the paper cannot be accepted “in its present form”