

Tips for SE paper reviewers

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What is the problem?

What is the purpose of reviewing academic papers?

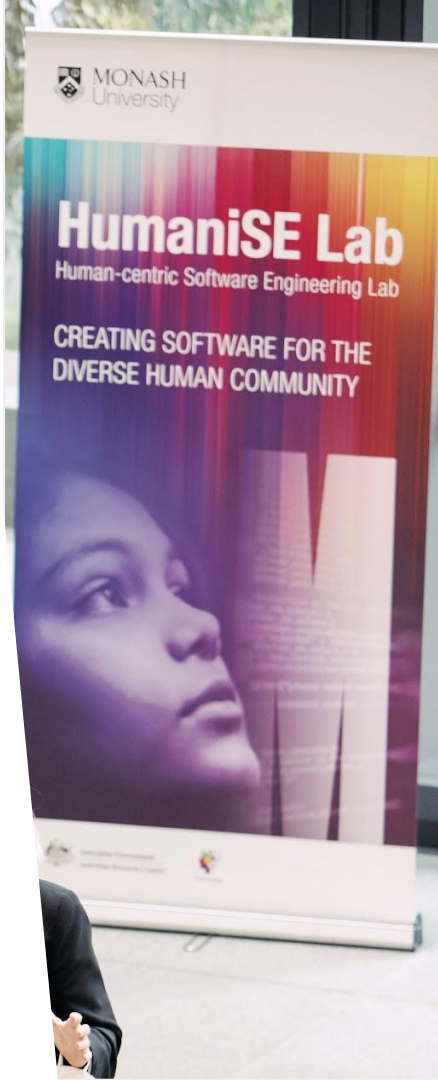
Reviewer responsibilities

Reviewer attitude

Things to do

Things not to do

When YOU get to assign papers / form PCs and EBs... :-)



Acknowledgement of Country

As we gather for this meeting physically dispersed and virtually constructed let us take a moment to reflect the meaning of place and doing so recognise the various traditional lands on which we do our business today.

We acknowledge the Elders – past, present and emerging of all the land we work and live on and their Ancestral Spirits with gratitude and respect.

I acknowledge the people of the Kulin nations, the traditional owners of the land on which I am meeting with you from today.

About me...

Quick CV analysis yesterday:

- 550 (exactly!) refereed papers published / accepted up to last week
 - =~1,500 or so reviews people have done on these!
 - plus ~2 dozen under review/revision - fingers crossed for accepts!!
- ~900 submissions submitted for review [note the diff to the number above... :-)]
 - =~2,700 reviews people have written for these!!!
- 68 grants funded (a couple under review, fingers crossed) - each reviewed by 3-5 people!
- ~120 grant submissions [also note the diff to the # above!] - ditto = ~400 reviews!
- I didn't write all these myself... Supervised/ing 65 PhDs (45 completions to date), 3 dozen post-docs and research assistants, 30 Masters by research, ~40 Hons research projects
 - Almost all resulting in papers in the total above
- **Refereed approx 1,390 papers** (give or take 20) since 1991 + **over 1,000 grant applications reviewed...** (been on national grant panels for ~15 years)

Title of Tim's talk - "Reviewer 2 - go F yourself (not)"

- Its a great talk title... :-)
- But:
 - Why do we think 'Reviewer 2' is so bad?
 - How did Reviewer 2 / Reviewers in general get such a bad rap?
 - What should Reviewer 2 / Reviewers in general be doing for us NOT to think this way? :-)
 - What should WE be doing when we are reviewing to not end up being labelled 'Reviewer 2' (even if we are reviewer number 2??)
- And...
 - Why do we review papers anyway?
 - Why is it 'community service' vs paid work?
 - How can we ensure we 'do a good job' as SE paper reviewers - and grant reviewers, PhD examiners, ...

Why are we having this talk

- There is a perception that SE (and maybe more generally scientific) paper reviewing / review system is 'broken'
 - Which may or may not be true / discuss for another day... e.g. publish or perish ; low acceptance rates ; lots of anti-pattern reviewing (see later)
- There is a perception - and maybe partial reality - that some / many SE reviewers are unfair, biased, slack, overly pedantic, subjective vs objective, irresponsible, downright untrustworthy and commit review misconduct...
 - Which may or may not be true some of the time
 - Lets try not to be one of them...
- Anyone even early in their research career has been subjected to reviews / reviewer behaviour that seems to fit one (or more) of the above
- 'Reviewer 2' has become a meme/label for this situation

Purpose of peer reviewing

- ✓ Gate keep academic publishing system
 - should we even do this is a discuss for another time...
- ✓ Determine 'quality' of submitted works for publication - related to above
- ✓ Have scientifically knowledgeable peers give constructive feedback to authors to improve reporting (and conducting) of their academic research
- ✗ Achieve low acceptance rates to increase prestige of venues
- ✗ Only publish works with positive outcomes
- ✗ Make sure only works conforming to current orthodoxy appear in press
- ✗ Quash unfashionable, unpopular, different, or work that might diminish one's own work / viewpoints
- ✗ Generate revenues for publishers by requiring page charges, subscriptions etc else work won't appear (even if its great)
- ✗ Hide behind anonymity and say whatever you like / get back at people don't like with impunity

Reviewer responsibilities / conduct expectations - my thoughts

- Only accept to do if can do timely, high quality job
 - But should do SOME - don't decline every invite please!
- Follow the guidelines and instructions of PC chairs consistently
 - Perhaps you don't agree with them all, but if we all review diff criteria...??
- Return reviews on time
 - Return reviews... my Associate Editor hat on here
- Adhere to conflict of interest management processes
- Write reviews that are respectful and constructive
 - That you would like to receive (more later)
- Review things you have sufficient expertise to review
 - OK to review outside but be clear that can't judge some details / focus on what can give objective, constructive feedback on
- Tell PC chairs if issues come up e.g. Col, low confidence, timeliness

Reviewer “attitude” - my thoughts / how I try and get my mindset

- Review like you would like to be reviewed
 - Do you really want to be labelled a ‘Reviewer 2’ ... ?
- How can I give constructive feedback for improving this work / this presentation?
- If some reviewing criteria not met - say so - but explain your reasoning carefully
- It deserves the level of time and care you would like your papers reviewed with
 - BUT - can’t read all in detail - focus on critical parts of the paper - motivation, method, results, key contributions - why should we publish it??
- Justify criticisms vs throw-away lines
- Balance time, detailed feedback, precise feedback - less is more often...
- Be accepting of negative results / inconclusive results - its research after all, and we can’t realistically expect all works to improve state of the art, can we???
- Be accepting of works that disagree with your own/your results - its not a criticism of you / your own work per se
- Find reasons to accept not reject
 - They keep saying this for conference PCs I am on, but...

SE reviewing - what I do (suggested: patterns to follow :-))

- I accept only reviewing roles I feel I can do - time, expertise, objectivity
- I accept as much as I can reasonably do ; delegate some of to post-docs/PhDs but take full responsibility and do some of every review even if have help
- I try and review how I like to be reviewed - even if the submission has serious flaws
- I always start with mindset I would like this work to be accepted/published
- I try and write clearly and constructively what needs to be done study design, study, writing/presentation/illustration to improve the work
- I always be polite, praise what is praiseworthy, clear and concise writing
- I try and encourage even if recommending reject (on this occasion)
- I follow conf/journal reviewing criteria / guidelines (even if I might have some issues with some of them!)
- I admit my mistakes/mis-understanding when reading author rebuttal and change my score/review - yes, I really do this!
- I participate in reviewer/PC discussions timely, in detail, in polite and professional manner
- If borderline/doubtful - I go in favour of accept/revision (vs reject)

SE reviewing - what I don't do (suggested: anti-patterns not to follow :-))

- Don't declare my COIs, take on works I know / I think I may have COI - if in doubt, don't review
- Reject all requests to review, return very late reviews, don't return reviews (!)
- Look for ways to reject the work as it conflicts with my views, my work, it just doesn't 'feel' right, I could do a better job writing it up, its better than my work and will make me look bad
- Make up my own reviewing criteria no one else is using for this style of work
- Say "this has been done before" with no justification - reject
- Say "this is not interesting" "results are obvious" "doesn't improve state of art" etc - reject
- Write 1-2 line reviews (yep, I've had a number of these...)
- Write a review without reading anything in the paper (pretty sure I have had some of these too)
- The authors are friends of mine, I know their work and like it so even if fundamental problems, accept it anyway as I know they'll fix it up etc, they'll owe me a favour
- Reject and use the knowledge in my own new work
- Bully junior reviewers @ the PC meeting / online discussion into changing to my viewpoint
- Review nice for a mate when suggested by them as they promised to do same for me
- I don't like this person, their gender, their country, their political views, they didn't say something nice about my work in their last paper, my cat is sick today... - so its a reject

SE review handling (some do/don'ts)

- When you are the PC chair/an Associate editor many related issues come up too...
 - ✓ Invite 'good' reviewers to be Associate Editors, PC members; don't the anti-pattern ones...
 - ✓ Assign papers to referees with relevant experience, reliability
 - ✓ Chase up slow reviewers in timely manner
 - ✓ Treat author concerns about reviews as I want mine treated
 - ✓ If a truly egregious (anti-pattern) review - remove it ; get another if need be
 - ✓ Remove consistent Reviewer 2s from EB, PC... !
- ✗ Pick only your friends to be on the PC/Editorial board, or those who look/think like you
- ✗ Assign papers to people to 'kill them off' ; assign papers I don't like the look of to 'hard' reviewers
- ✗ Be (very) late assigning reviews; don't (!) assign reviews at all (one of my papers sat unassigned for 12 months once...)
- ✗ Insist all papers need three 'Accept' decisions no matter what
- ✗ Assign new reviewers to major revisions and make the authors fix a whole heap of new feedbacks (sometimes this OK but be very careful...)
- ✗ Ignore queries from authors about where their reviews are at, ignore complaints

Summary

- Reviewing others academic papers is expected contribution to being an academic and should be done to professional level expected of other aspects of the job
- Should 'do your share' - but not too much / none
- Should treat as very important service contribution
 - Be nice to be actually paid for it, but...
- Follow reviewing instructions, do in timely manner, do 'quality' review of level you would expect/like on your own submissions, look for reasons to accept, be constructive with feedback, justify criticisms, adhere to Col rules, ...
- Don't take on too much, return late/not return reviews, do perfunctory reviews, criticise with no justification, try and 'kill off' things you personally don't like, 'get back' at someone who you don't like, attack the author, breach confidentiality, steal the ideas, review your own student/supervisor/partner's work (!), submit fake reviews for your / your mate's work, ...
- You be in charge of forming PCs/Editorial Boards of reviews one day...