SaTC: Conference Review Process

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Moderator: Lujo Bauer

Panelists: Thomas Ristenpart (Oakland), Michelle Mazurek (PETS), and Kevin Butler (USENIX Security)

Deadlines

1. What is the ideal number of deadlines?

Tom: Once every month was insane – too much work. Three deadlines (in a year) is the ideal number. This number is still good for author, since it allows a rolling window. On the flip side, this number of deadlines still gives break to the organizers to transfer information (if new chairs).

2. Why not two deadlines?

Tom: Haven't tried it yet. We managed with three, and it did not feel like a pain point. We aimed to maximize the number of deadlines we can handle without feeling too stressed.

Reviewing process

1. What are the appropriate qualifications for reviewers?

Senior PhD students and post-docs. However, we do worry about pushing too much workload onto students.

2. How do you deal with conflicts from delegated reviewers and external reviewers?

Michelle: We do some manual checking. Finding external reviewers is very painful.

3. Have you discovered postmortem conflicts?

Tom: happens sometimes – we have to decide whether to throw out the review, etc. The process is on a case-by-case basis and not scalable.

Scaling

1. Conferences are growing alot. Is that a good thing?

Tom: Scaling is a good thing – federal government is dumping money into security. We want to make sure we are managing the money carefully.

2. As organizers, describe which problems would you liked solved for the next year?

Tom: Onboarding onto PC is a mess! Finding 200 people in an equitable or transferable way is very difficult. Maybe we need to rethink how to do service in general?

3. What if we make the number of deadlines 0?

Tom: Anecdotally, 0 deadlines seems to make the number of papers go down and quality of papers go up.

Michelle: 0 deadlines has resulted in less grants for me personally (less urgency to do certain kinds of work).

4. Are journals the answer to scaling?

Tom: Eventually we will transition to journals, which is the only real way to scale.

Michelle: But journals do have drawbacks. For example, reviewer's cant see feedback. There is also no discussion among reviewers, which would hurt junior reviewers.

Signaling

1. We all believe conference papers are meaningful, but not terribly meaningful. Can we build a model where each paper is given less labels of quality, where there are multiple levels of reviews for papers to jump through.

Lujo: some fields have this. Conference papers are 4 pages, and the hard part is the journal publication.

2. How do we deal with paper inflation? It used to be that 1-2 conference papers indicated a PhD well done. Now, however, you need more papers. What is a different way to measure output?

Tom: Instead of counting the number of papers you have, we have to replace that with something else. One metric would be number of best paper awards. As we scale, we need to keep in mind that we can't sustain this inflationary dynamic. Increasing the number of papers has correlated with the overall quality of papers going down.

Kevin: Many institutions do not understand what conference papers are in computer science. Conference papers don't exactly correlate to journal in other fields. Do you need to get your paper into Nature in order to get a top tier job? Is THAT THE WORLD WE WANT TO LIVE IN! Having more opportunities is a good thing.

We need to balance the perceived value of paper vs number of times it takes to get in there. How much of our career do we stake on the whims of others?

Gene: Main problem is when you look at younger researchers. For more senior researchers, you can also use citations as a metric.

Note, we have two separate problems: the metrics for measuring performance, and the quality of papers.

Trends

1. What is the distribution of papers in terms of types? Where are the trends in security?

Kevin: Security + ML has had huge uptick (Michelle agrees), but acceptance is low. Blockchain has also increased.

Reviews, Rejection, and Rebuttals

1. Has reviewing quality gotten worse over time?

Half room raises hand for worse, only a handful raise for better.

Patrick: we need to consider Covid as well. Burnout is real, and has caused decrease of quality in reviews.

2. What are the common reasons for rejection?

Tom + Michelle joking: ML in the abstract gets the paper rejected. Papers that are too incremental, or poorly written are also often rejected. Note, poorly written papers are a huge problem, since it can make a very interesting paper look like an incremental one.

3. Is there a case for desk rejecting more papers?

Kevin: Last cycle, we rejected at least 10% of papers. Reasons included: not conforming to conference policy, papers were not anonymized, or papers were out scope (but we were careful with this one).

4. Would it be appropriate to anticipate and address rebuttal questions in the paper's appendix? How would this sit in terms of etiquette with reviewers and PC chairs?

Michelle: anecdotal experience is that rebuttals matter a lot in ultimate decision. Rebuttals should be careful to actually answer the questions that reviewers are asking.

5. Does the rebuttal process require oversight from program chairs? Who enforces the checks and balances for the reviewers?

Tom: that's the whole problem, its not scalable. Area chairs are one answer.

6. What is the role of a major revision?

Michelle: Acceptance rate for new submission is 10-15%, but 80-90% for major revisions. Overall, this results in better papers.

Kevin: Is it an accept class decision, or a reject class decision. We decided that it was a reject class decision.

Overall agreement: lack of response to rebuttals needs to be addressed.

Artifacts

1. What is your opinion on the role of artifacts?

Tom: Artifact evaluation is awesome. It's nice how it we introduced it slowly - opt in and now soft requirement. Making it a hard requirement seems like it will involve a lot of overhead.

Michelle: However, once at PETs an artifact reviewer caught a problem, which means that we need another process to evaluate the artifacts.

Kevin: Maybe we should push the artifact evaluation earlier onto the process.

Tom: If the artifact is complete junk, you should retract the paper. There is no official policy for retracting a paper, which is a bit ridiculous!

Looking Forward

- David: What is the overall goal, what are we trying to accomplish for the community and what do we want the conference experience to be like (especially in the context of hybrid conferences). What should the experience be, and what should the review process be in order to support that?
- Tom: What should we do as a community to coordinate discussion going forward?
- Lujo: Would it be useful to have a public discussion that spans all the conferences about this types of topics?
- Michelle: Cautioning us that this is a pure volunteering effort. We need to find resources to support discussion and improvements to conferences.

Favorite Phrase

Ban All Deadlines.