Signal Processing Society AE Best Practices

Slides prepared by Thrasos Pappas, past SPS VP-Publications, based on best practices accumulated since the first AE Best Practices at ICASSP 2009, organized by Sheila Hemami.

June 7, 2023



Effective Reviewer Management

- Selecting reviewers
 - Expertise (specialized vs. general background)
 - Background and experience
 - People who have interest in the work
 - + One whose work the paper is comparing to
 - Different perspectives on the work
 - Reviewers from other communities
 - + Promote cross-fertilization
 - + Avoid reinventing the wheel
 - + But ... different standards in different fields
 - Personalized invitation letters help attract reviewers
 - Diversity: Culture and nationality
 - Familiarity with reviewers

Effective Reviewer Management

- Selecting reviewers
 - May add reviewer for revisions (special role made clear)
 - English proficiency of reviewers
 - Other AEs only for emergency reviews
- Tell EiC if you are not comfortable handling the paper

Effective Reviewer Management

- Timeliness of reviews
 - Difficulty finding reviewers: references, recent publications, keywords
 - Invite more reviewers: delayed response to invitation, delayed review
 - Reminders, motivation, cultural holidays
 - Hard limit on how long you can wait for review
 - Do not sacrifice quality!
 - Give more time to good reviewers but set clear time limits
 - Fast reject better than no response for a long time
- Asking reviewer to improve reviews
 - Short review, no justification
 - Comments (sufficient details) and recommendation
 - Motivate reviewer (expert, responsible, trust)
- Emergency reviews
 - Professor or one of her/his students
 - Personal appeal, phone call

Effective Decision Management

- Understand what the paper is really about
- Secure at least 3 reviews (even though ops manual requires 2)
 - A lot easier to defend a decision based on 3 reviews
 - Not vote-counting, based on content of the reviews
 - Reviews are only advisory
- What are the main contributions?
- Are they significant? Even if technically correct. Novelty is too narrow!
- Balance between incremental and ground breaking papers
- Incremental: Be tough, contribution must be substantial
 - Better performance, theoretical/algorithmic extensions, etc.
 - Beware of authors who spread results over several papers
 - Or authors that duplicate results with superficial changes
- Ground Breaking: Be more lenient
 - New ideas may not be initially competitive with state of the art
 - Reviewers may be less receptive to new ideas, perspectives, people

Effective Decision Management

- Conflicting reviews
 - Add another reviewer
 - Read the paper yourself
 - May add your own opinion (eponymously)
 - If RQ, clear instructions to the authors, which reviewer comments they need to address
- Do not worry about acceptance statistics, just quality
- Be fair and respectful
- Selective/inclusive balance
- R and RRQ (vs. RQ)
 - Insufficient quality
 - Major rewrite needed, revision requires > 6 weeks

Explaining the Decision

- Justify and clearly communicate the decision to the authors
 - Active and clear decision letter
 - Synopsis of synthesis of the reviews
 - Why a rejection decision was made
 - Explain what authors need to do (RQ or AQ)
 - Especially in case of conflicting reviews
 - Not all comments/suggestions are correct or need to be addressed
 - Facilitates your task of handling revised paper
 - Be courteous

Based on the enclosed set of reviews, I am recommending that the manuscript be REVISED AND RESUBMITTED (RQ).

Please understand that this was not an easy decision to make, because I do share the opinion of two of the reviewers that this work may not be mature enough for publication in the IEEE Transactions. Some of the criticism from the reviewers is quite serious, and I was initially inclined towards a rejection. Nevertheless, I eventually decided to give your manuscript the benefit of the doubt, with the presumption that you will make the best use of the constructive remarks from the reviewers. Please pay particular attention to the comments from the fourth and (especially) from the third reviewer. The manuscript requires also a substantial rewrite, to improve its readability.

Leave option of adding further referees if necessary

Based on the enclosed set of reviews, this manuscript has been REJECTED for publication.

The criticism of the reviewers is concerned mainly with the following important aspects:

- technical contribution;
- experimental validation, and how this is used to support the conceptual development of the method;
- quality of the results (some evident staircasing artifacts, which are not resolved by the NL refinement)
- how your contribution is put in perspective with prior works.

I regret that I cannot offer a more positive decision. I hope you will nevertheless find the reviewers' remarks constructive and helpful for your research.

Based on the enclosed set of reviews, I am recommending that the manuscript be REVISED AND RESUBMITTED (RQ).

I have to confess that I personally feel that this manuscript is borderline and I have been hesitant about an outright rejection. I completely agree with the concerns by the third reviewer, about the marginal novelty and the shallow analysis of the method.

The experimental validation is not thorough and does not provide sufficient evidence that the proposed method is truly better than the existing alternatives, neither sufficiently different than what is proposed in "," IEEE 2013. The title is also misleading, as noted by the reviewers.

Rather than an outright rejection, I nevertheless decided to give the manuscript the benefit of the doubt. This decision is facilitated by the three referee reports, where the aspects that must be addressed to make this work acceptable have been indicated in a precise and unequivocal manner.

It amounts to a very major revision, because substantial required material is completely missing.

The revised manuscript will be rejected unless all the issues are satisfactorily addressed.

Leave option of adding further referees if necessary

Based on the enclosed set of reviews, I am recommending that the manuscript be REVISED AND RESUBMITTED (RQ).

Overall, even though with different degrees of criticism, there is great consistency between the various comments and recommendations from the five reviewers.

There is a general agreement among the reviewers that the conceptual novelty is marginal, and may alone be insufficient to warrant publications in this Transactions. Moreover, Reviewer 3 has additional remarks on the originality of a few specific technical points, which you are requested to clarify.

On the other hand, the practical application has been appreciated, and some reviewers are rightly encouraging you to shift the emphasis of this work on its practical elements.

The guidelines of this Transactions would not allow a second major revision. I am here making an exception, as I wish to give you another (and last) opportunity to properly emphasize and prove the practical value of your work.

While the manuscript does require significant editorial work, a fundamental issue to be addressed is the reproducibility of the method and its results. I regret to say that I do agree with Reviewer 4: due to the heuristic design, there is inevitably some healthy skepticism about the overall stability, robustness, and convergence of the proposed algorithm. An implementation of your algorithm would really allow all reviewers to provide a fair assessment of your work. It should also make it easier for you to defend your claims against the reviewers remarks. Therefore, in the best interests of your work, I sincerely encourage you to make an implementation available, together with the revised manuscript.

Please make sure to address ALL reviewers comments in your revised manuscript and to submit a document explaining how these comments were addressed.

Revision Management

- AQ: Handle it yourself
 - Not AQ in place of second RQ
 - If you need to send to a reviewer, be specific what questions the reviewer needs to answer; fast turnaround
- Second round of reviews (RQ)
 - Read author explanations
 - Did the authors address AE expectations?
 - Guide reviewers
 - Do not bring up new issues, except if ...
 - new evidence has come up (e.g., another paper by the authors)
- Revisions in response to R (major rewrite)
 - Major rewrite substantial departure from previous submission
 - Authors must explain how the paper addressed reviewer concerns
 - Invite a mix of former and new reviewers

Paper Length

- Should monitor throughout review process
- Authors tend to add material to satisfy reviewers
 - Easy but does not make a good, readable paper
 - A lot of effort is needed to write a concise paper
 - But pays off, increases impact (real impact, not numbers)
 - People will not read long, boring papers
- Clear instructions in decision letter (additions and cuts)
- Ask reviewers to help by suggesting both additions and cuts
- Consult with EiC if paper is getting too long (>16 pages after revision)
- Pages charges: a separate issue
- Authors are responsible for the length of the paper (and overlength page charges), no matter who requested the additional material

Plagiarism

- Alert EiC
- Level of plagiarism
 - Definitions, backgound, Wikipedia entries
 - Text (verbatim or paraphrased)
 - Theorems, algorithms, experimental results
- 3 reviewers better than 2 to catch plagiarism
- Plagiarism checking tools
- Do title and key phrase search
- Allegations of plagiarism by a reviewer
 - Verify or reject allegations even if paper is rejected for other reasons
- Dual submission to conference and journal
 - Not (self-)plagiarism
 - Must cross-reference

Novelty, Parallel Submissions, Plagiarism

- Similar papers by one set of authors to two journals
 - Must cite each other, even if they have not been accepted
 - OK to upload same document on Arxiv.org
- Similar papers by two different sets of authors
- Informal publications (class notes, web postings, conferences without proceedings)
- When is novelty assessed?
 - At time of submission, not at time of editorial decision
 - Prior art not established unless paper has appeared on journal, conference proceedings, arxiv, easily available technical report
- Conference to journal papers
 - Additional contributions clearly identified benefit
 - Must cite conference paper (footnote or references)
- Journal to conference paper (presentation only, if accepted)

Conference to Journal Papers

• It is acceptable for conference papers to be used as the basis for a more fully developed journal publication. However, authors are required to cite their related prior work, either in the introduction or in a footnote. The papers cannot be identical, and the journal paper must be justified by a clearly identified benefit that its publication offers to the research community beyond the already published conference paper. For example, the journal paper may include additional analysis, novel algorithmic enhancements, added theoretical work, completeness of exposition, extensive experimental validation, etc. The added benefits of the journal paper must either be apparent from a reading of the introduction or abstract, or clearly and concisely explained in a separate document that accompanies the submission.

Journal to Conference Papers

• Journal to Conference Paper: If an SPS journal paper has already been accepted for publication, the authors are allowed to submit the paper to one of the SPS conferences for presentation-only, without a separate publication. The conference technical program chairs will decide on whether or not to accept the presentation based on the conference scope, available space in the schedule, and where the original journal paper has appeared.

Immediate Reject

- Administrative
 - Out of scope
 - Poor presentation difficult to read
 - Resubmission without justification
 - Substantial overlap with prior or concurrent publication without citing the other publication – in a footnote or the body of the paper
- Editorial
 - Lack of novelty
 - Lack of sufficient experimental results
 - Overlap with prior publications
 - If appeal of the IR is made by the authors:
 Two sets of eyes, independent of decision maker
- Need a paragraph or two explaining reasons for immediate reject

Other Issues

- Dealing with difficult authors
- Difficult issues brought up by reviewers
- Reviewer exclusion
- Conflicts of interest with reviewers or AE
- Author complaints
 - Important to respond
 - Understand author complaints
 - Coordinate with EiC if needed
 - Be fair
 - Mutual respect
 - Follow operations manual to avoid lengthy arguments

Other Issues

- Citing papers
 - Cite only papers that relate to the current work
 - Write a few words on how each cited paper relates to current work
 - Do not allow reviewers to suggest citations simply in order to boost their h-index
- Resubmission of a rejected paper
 - Must cite, let the editors know it is a resubmission
 - Supporting document that explains how it has addressed problems raised during the previous review and rejection
 - Must be substantially different from rejected paper
 - Must not be treated as a second major revision
 - If any of the above is not addressed, it must be immediately rejected

Suggested Author Practices

- Always cite the source
- Avoid verbatim copying
- Point out your new contributions
 - Introduction (and abstract)
 - In separate sheet?
- Write a few good papers, not many mediocre ones!

