Publication Strategies

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Outline

• Why should you publish?
• Where should you publish?
• What’s in a research paper?
• The ethics of attribution
• Useful strategies and tactics

Please ask questions any time!
Why Should you Publish?

• To communicate new findings
  – publication = ultimate result of scientific research

• To share results with your community
  – build awareness, contacts, collaborations

• To get useful feedback from peers (reviewers)
  – external, independent, frank (anonymous)

• To build your CV (and CV of colleagues)

The research isn’t finished until it is published!
Where Should you Publish?

Proceedings
- faster process
- limited space
- one chance for acceptance
- earlier community awareness of work
- opportunity for direct contacts and discussion

Journals
- longer process
- more space
- opportunity to address comments and resubmit
- wider, possibly more diverse audience
- more highly rated by evaluation committees
Where Should you Publish?

Suggested targets for publications:

• ACM/IEEE top-tier journals:
  – TOSEM, TSE, TOPLAS

• Top-tier SE conferences:
  – ICSE, FSE, OOPSLA, POPL

• Specialized journals and symposia:
  – ESEJ, ISSTA, RE, CAV, .....

• “Middle-tier” journals and conferences
Where Should you Publish?

Suggestions on things to avoid:

• Over-abundance of mid-tier publications
• Low-tier journals and conferences, e.g. those “needing papers”, or lacking serious reviewing
• Low impact journals
• Venues outside those known in your community
Where Should you Publish?

To decide on conferences, check:
• Submission topics in calls for papers
• Who is on the PC (appropriate for topic?)
• Past acceptance rates
• Papers accepted for prior programs

To decide on journals, check:
• Who is on the editorial board
• Papers accepted for prior editions
• Impact factors (see Wikipedia for further info)

Still not sure? Ask your mentors!
What’s in a (Successful) Paper?

Write your papers for readers (and this includes the reviewers)

- As communication between you and them
- Considering their backgrounds
- With evaluation criteria in mind
What’s in a (Successful) Paper?

Evaluation criteria for research papers

- Original contribution
- Significance
- Sound results
  - Algorithms and methods
  - Evaluation
- High-quality presentation

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Evaluation criteria for research papers

• Original contribution
  – specify objectives, contribution clearly
  – compare with related work carefully
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What’s in a (Successful) Paper?

Evaluation criteria for research papers

• Significance
  – discuss why this problem is significant
  – discuss why your solution is significant (how is it useful? does it scale?)
  – avoid least publishable unit (LPU) papers
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What’s in a (Successful) Paper?

Evaluation criteria for research papers

• Soundness (algorithms and methodologies)
  – present algorithms and methodologies clearly so readers can judge correctness
  – explain algorithm in text
  – provide examples to help understanding

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What’s in a (Successful) Paper?

Evaluation criteria for research papers

• Soundness (evaluation)
  – describe experimental method carefully, enough to allow replication
  – provide separate discussions of data and its interpretation
What’s in a (Successful) Paper?

Evaluation criteria for research papers

• Presentation
  – high cohesion: one paper, one result
  – self-contained: add anything needed to understand results
  – use transitions to keep readers with you
  – polish, polish, polish and spellcheck

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Publishing Process (Journal)

Initial submission: paper, cover letter, contact info, relation to other papers

Wait for editorial decision

Reject

Revise: use reviews to improve paper

Accept

Submit again: same or (usually) other journal

2-4 reviewers (often disagree)

Reviews aren't always on time

Correct proofs quickly

Submit materials
Publishing Process (Journal)

Editor re-reviews

Initial submission: paper, cover letter, contact info, relation to other papers

Wait for editorial decision

Reject

Revise: use reviews to improve paper

Accept

Revise: use reviews to improve paper

Submit again: same or (usually) other journal

Resubmit: paper, detailed response to editor, reviewers on how the revision addresses concerns

Correct proofs quickly

Submit materials
Publishing Process (Journal)

Initial submission: paper, cover letter, contact info, relation to other papers

Reviewers re-review

Wait for editorial decision

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Revise: use reviews to improve paper

Resubmit: paper, detailed response to editor, reviewers on how the revision addresses concerns

Reviewers re-review

Wait for editorial decision

Accept

Revise: use reviews to improve paper

Submit again: same or (usually) other journal

Correct proofs quickly

Submit materials
Publishing Process (Conference)

Initial submission: paper, contact info, possibly abstract earlier

Wait for PC decision

Revise: use reviews to improve paper

NEVER ask for paper to be reconsidered. There is “memory” from conference to conference.

NEVER ignore reviews. There is “memory” from conference to conference.

Submit materials

Submit: to another conference
Publishing Process (Conference)

Rebuttals – a Recent Phenomena

Initial submission: paper, contact info, possibly abstract earlier

Wait for PC decision

Reject: use reviews to improve paper

Accept: revise: use reviews to improve paper

Rebuttal request

Prepare rebuttal: correct misperceptions

Submit: to another conference

Revise: use reviews to improve paper

Submit materials
The Ethics of Attribution

• Each author should have contributed
• Order of authors normally reflects weight of contribution (in producing results or writing)
• Every author must be aware of being an author!
• Set of authors should remain invariant throughout the review process (to avoid conflict of interest problems)
• Use your acknowledgments section generously
• Advice: in case of doubts or problems, discuss things with authors and colleagues
Other Strategies and Tactics

• Every 6-12 months, map out a papers plan with your students (and collaborators)
• Expand conference papers into journals
• Start a pipeline of journal papers
• Emphasize high quality – more than quantity
• But, not every paper is top tier, and other considerations may motivate choice of venue
Other Strategies and Tactics

• Improve and resubmit rejected papers (paying attention to reviewers!)
• Learn to write a good response letter
• Utilize workshops for early feedback, but don’t over-utilize them
• Use technical reports strategically
Other Strategies and Tactics

• Don’t publish too soon!
• Don’t publish too late!
• Review papers (well) and learn from them
• Feel free to ask editors for clarifications
• Try not to be (too) frustrated by rejections
Cautions!

• It’s essential to maintain your reputation, and that of your students and colleagues.
• Don’t represent other persons’ work as yours.
• Adhere to rules for using quotations versus paraphrasing, and place citations appropriately.
• Make sure your students do the same.
Cautions!

• Don’t flood the market
• Repeated publications of weak papers can severely damage your reputation
• Avoid “simultaneous submissions”
• Don’t ignore reviewers
• Don’t suggest reviewer names
• Don’t misrepresent other authors’ work
Seven Take-Home Messages

• Research isn’t finished until it is published
• Write your papers with evaluation criteria in mind
• Publish in high-quality conferences and journals
• Respond to reviewer comments and concerns
• Review when asked and be a good reviewer
• Maintain high ethical standards
• Do good work, and have fun
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