

# Publication Strategies Publish (and not Perish)

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## Outline

- Publish...why?
- Publish...what?
- Publish...who? for whom?
- Publish...when?
- Publish...where?
- Publish...how?

## Publish...Why?

- **To communicate new findings**
  - publication = ultimate result of scientific research
  - research work is never finished until it is published
- **To let the community know about your work**
  - recognition
  - contacts, fruitful collaborations
- **To get useful feedback from peers**
  - external, independent, frank (anonymous)
- **To embellish your CV (+ CV of colleagues)**

## Publish...What?

### Types of research contributions

- **Invention** of model, method, technique, tool to
  - develop, structure, restructure, reuse
  - analyze
  - evaluate
  - measure
  - understand ... software artifact or process
- Experiment-based **discovery**
  - of phenomenon, law, structure, etc.
  - about software artifact or process

## Publish...What (cont'd)?

### Evaluation criteria for research papers

- Original contribution
- Significant
  - problem
  - solution in SE context
- Sound results
- High-quality presentation

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Abstract  
Introduction  
Body  
Evaluation  
Discussion  
Related  
Conclusion

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  - specify objectives, contribution clearly
  - compare with related work carefully
  - implement objectives carefully

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- Significant

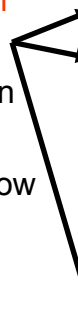
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  - discuss why this problem is significant
  - discuss why your solution is significant (i.e., what it may be useful for, why/how it scales up)

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## Publish...What (cont'd)?

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## Publish...What (cont'd)?

### Evaluation criteria for research papers

- Soundness (all)
  - make paper technically readable, verifiable

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## Publish...What (cont'd)?

### Evaluation criteria for research papers

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  - IMRAD structure of experimental papers
  - describe experimental method carefully.. can be assessed and replayed
  - don't mix results—data, interpretation

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  - high cohesion: one paper, one result—not too much, not too little (LPU problem)
  - self-contained paper—put anything needed to understand results
  - tree-structured presentation (goal-subgoals)
  - say what you're going to discuss before discussing it
  - avoid mere description of work done
  - avoid sins of novice writers: omission, inconsistency, inadequacy, ambiguity, redundancy, forward reference, remorse

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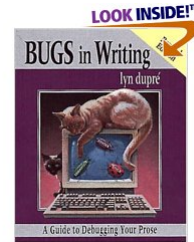
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### Fruitful bedtime reading

- Lyn Dupré, *Bugs in Writing*. Addison-Wesley, 1998
- R.A. Day, *How to Write and Publish a Scientific Paper*. Cambridge University Press, 1989
- S. Schwartz, *Towards Better Scientific Writing*. 1982.
- D. Solow, *How to read and do proofs*, Wiley, 1990.
- AvL, Tech Writing, Course Notes, UCL



## Publish ...Who?

- Each author should have **contributed** in some way
- **Order of authors** normally reflects contribution weight
  - in producing results
  - in writing paper
- Every author must be **aware** of being an author (!!)
- Set of authors should be **invariant** throughout the review process (to avoid conflict-of-interest problems)
- **Advice:** In case of doubt/problem, discuss it with authors/colleagues

## Publish ...for Whom?

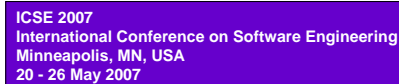
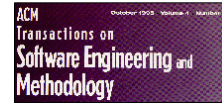
- For **readers** (in particular, the reviewers)...NOT for you
- Think of paper as
  - pedagogical explanation of **results**
- Write as if thinking of  
“**you and me together**”

## Publish ...When?

- Not too soon...and not too late
- Not too often (unless you are genius)
- **Advice:**
  - refrain from submitting half-baked ideas—  
keep them for workshops

## Publish...Where?

- **Int'l journals**
  - research articles, letters, surveys, “comments on,” magazine articles
  - different quality standards, selectivity, and impact
- **Int'l conferences**
  - research papers, posters, experience reports, etc.
  - different quality standards, selectivity, and, impact



## Publish...Where (cont'd)?

### Journals

- more impact (especially long-term impact)
- more highly rated by promotion committees
- (much) deeper reviews
- more space
- wider target audience (usually)
- fast-track special issues

### Proceedings

- faster process
- direct contacts and discussions, and community awareness
- sometimes more selective
- often best papers selected for journal issues

**Both:** Expanded version of conference paper can be submitted to journal (with spec of differences)

## Publish...Where (cont'd)?

- **To decide which conference, check**
  - “submission topics” of CFP
  - PC members (appropriate reviewers for your topic?)
- **For good, selective conferences**
  - mention ratio in your publication list (start recording now)
    - # accepted papers / # number of submissions
  - available from decision letter, proceeding's foreword

## Publish...Where (cont'd)?

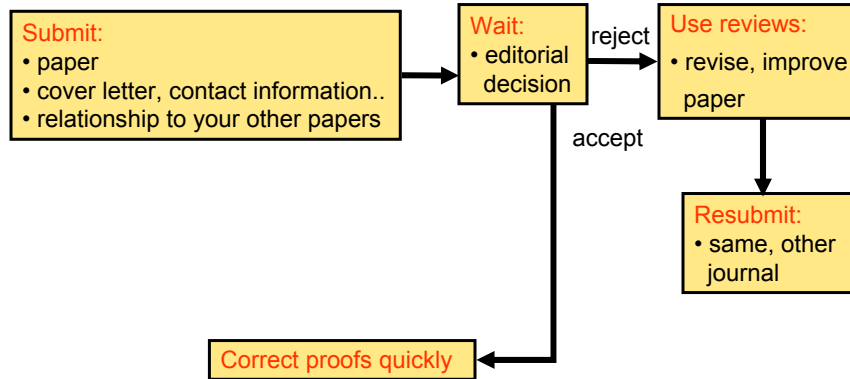
### Avoid

- poor-quality journals/conferences (e.g., needing papers, lack serious reviewing process)
- low-impact journals/proceedings (check impact factor)
- papers outside your community (example)
  - # accepted papers / # number of submissions
- available from decision letter, proceeding's foreword



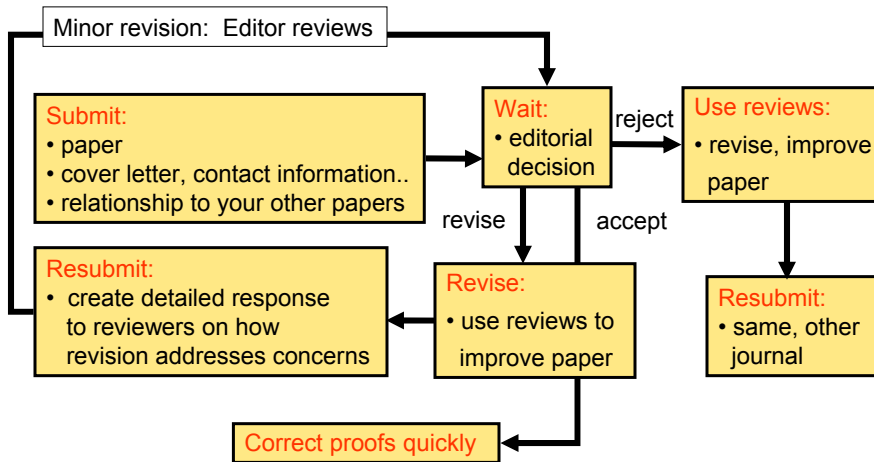
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Do as author of journal submission...



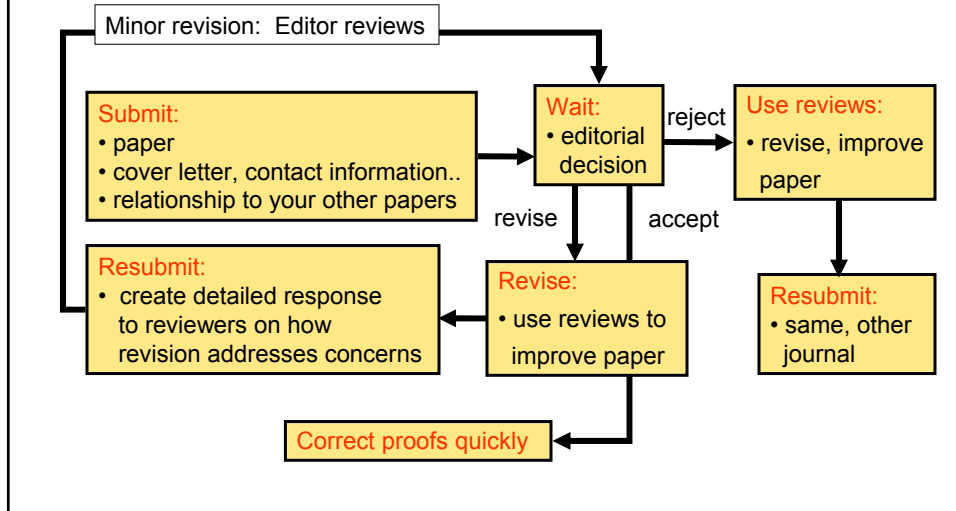
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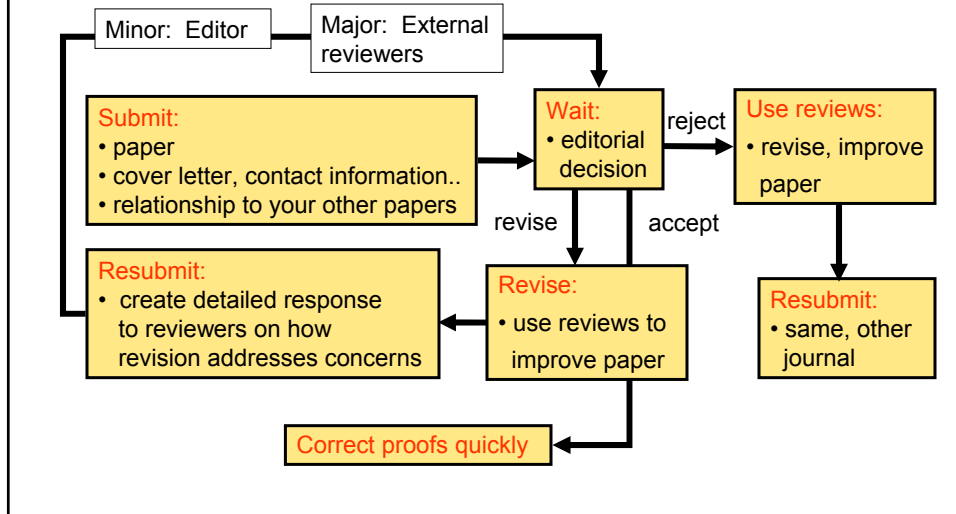
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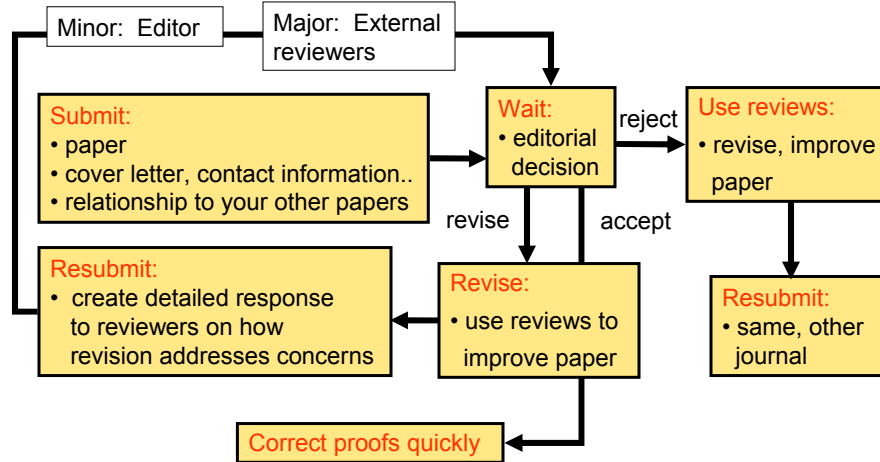
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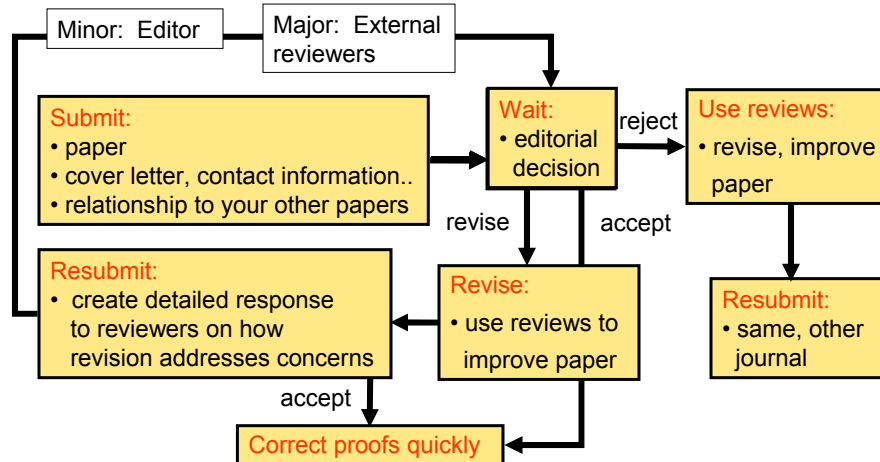
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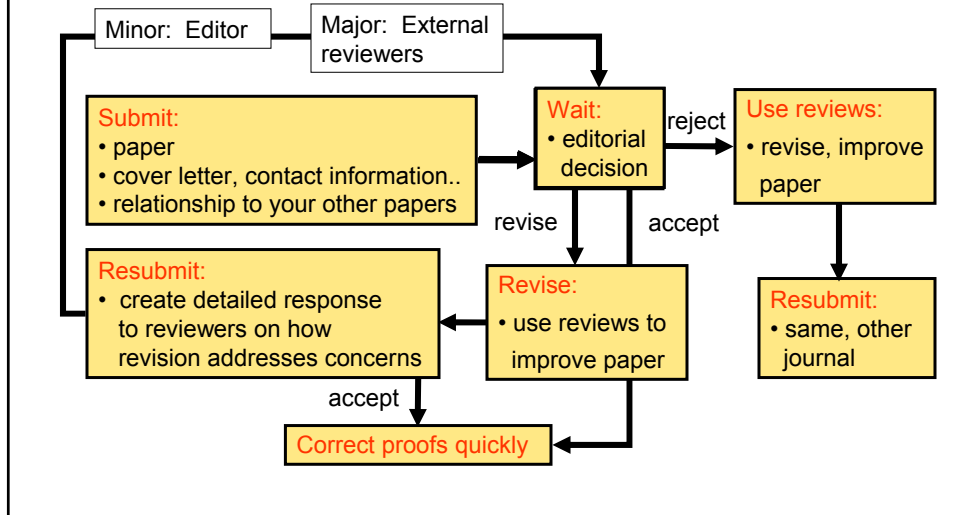
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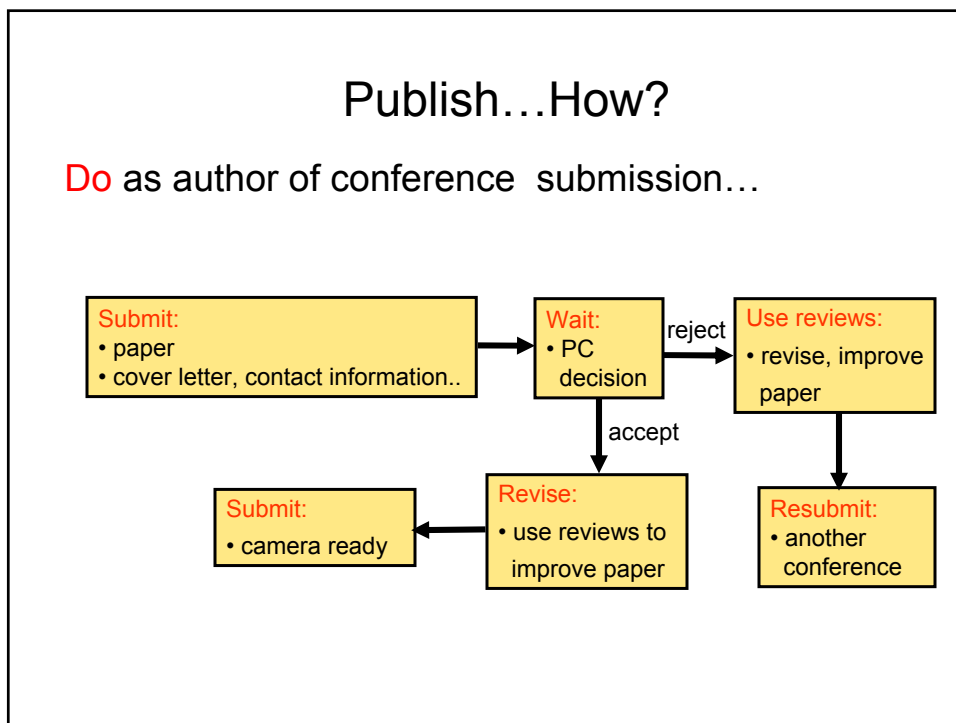
## Publish...How?

Do as author of journal submission...



## Publish...How?

Do as author of conference submission...



## Publish...How (cont'd)?

**Don't** as author of journal/conference submission...

- use reviewers as “debuggers” for your papers
- suggest referee names (NEVER) unless asked (which sometimes happens for journals)

## Publish...How (cont'd)?

Reviewers

- 3-4 reviewers (most often disagree)
- many exceptional scenarios (e.g., abnormal reviewer behavior)

What if you don't agree with reviewers comments

## Publish...How (cont'd)?

### Some comments

- Reviewers
  - 3-4 reviewers (most often disagree)
  - many exceptional scenarios (e.g., abnormal reviewer behavior)
  - Don't use reviewers as "debuggers"
- Do NEVER suggest referee names !!
- For journal submission:  
what if... you feel that the process is too slow?
  - ask the editor/EiC for an update BUT do it wisely and NOT too often (e.g., every 3 months)

## Publish...How (cont'd)?

- What if... you don't agree with...
  - editorial/PC decision
    - NEVER ask to reconsider unless you have irrefutable evidence of unfair decision
    - For journal: you may ask the resubmit a fully revised version of a rejected paper but it's anyway going to be handled as a submission covering new work
  - reviewers comments
    - if this may help in your work, ask the editor to forward your (polite) questions to the reviewer --e.g. for clarification of some points she made

## Publish...How (cont'd)?

- Corollary:

As you benefit from a system, you must contribute to it

⇒ you should not decline review requests in your area unless very specific/serious reasons

*do reviews as good as those you would like to receive*

## A few Typical Comment Patterns

- “the objectives are unclear”
- “too little beef”
- “the authors seem to ignore ...”
- “the paper fails to deliver what it promises”
- “unsubstantiated claims”
- “opinion paper...”
- “premature...”
- “the paper provides little evidence that the results do apply in real settings”, “scalability is questionable”, etc
- “evaluation is weak”
- “rambling discussion...”
- [to editor/PC:] “boring”, “unexciting”, “

## Final Thoughts

- Publish (& not perish)
    - good work
    - in high-quality journals & conferences
    - with good collaborators
    - at right time
  - Be a good reviewer
  - Have fun!!
- Note:** repeated publication of weak papers may severely damage your reputation...

## Acknowledgements

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