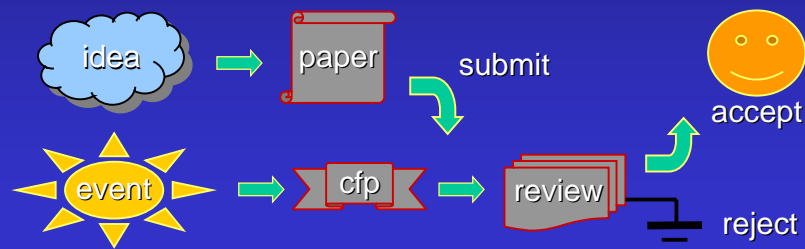


Getting Your Work Published or How to Write a Great Paper

Martin Hering-Bertram



Why publish?

- your salary depends (publish or perish)
- project funding
- Ph.D.
- it's cool!
- your reputation (position yourself in a community)
- having fun at conferences

What happens to your submission?

- evaluated by 2-5 reviewers
- senior reviewer files recommendation
- committee discussions, re-evaluation
- conference chair / journal editor decides

- can I serve as a reviewer? → YES!







Why are papers rejected?

- no significant contribution
 - not appropriate for event
 - lacking structure
 - technical errors
 - bad writing
 - submission requirements
 - other papers were better
- } can be avoided

References

- Jim Kajiya, *How to Get Your SIGGRAPH Paper Rejected*
<http://www.siggraph.org/publications/instructions/rejected.html>
- Ken Joy, *How to Give a Professional Talk*
<http://graphics.cs.ucdavis.edu/~joy/Talks/Kens%20Talks.htm>
- Justin Zobel, *Writing for computer science*, 2nd Edition, Springer, 2004
<http://www.justinzobel.com>

Outline

- where to publish 
- developing ideas 
- structure 
- writing 
- review your work 
- summary 

Choosing the right event



- study call for participation (cfp)
- look at proceedings
- which community is addressed?
- what is the rate of acceptance?

- is your paper appropriate for this event?
- can I make the deadline?

Conference papers

- 4-10 pages short
- research / application / case studies
- fixed deadline, one reviewing cycle
- short decision time (few months)

- good for publishing novel ideas / work in progress

Journal papers

- 8-30 pages long
- solid technical contribution
- multiple reviewing cycles: implement suggested changes and re-submit
- no deadline, takes time (>1 year)
- if you have some really good stuff

Special-issue journals / books

- special topic (must fit!)
- fixed deadline, 1-2 rev. cycles
- sometimes limited size
- high competition
- no presentation (like regular journal)
- sometimes great opportunity!

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Developing Ideas



- come up with something fancy
(really crazy ideas have a great chance)
- study related work
(is this really new?)
- run experiments / analyze
(does it work?)
- how can you sell it?

Contribution

- what is the main contribution?
 - a novel algorithm / method
 - a new way of looking at things
 - survey / comparison of existing methods
- how does it compare to related work?
 - efficiency, robustness, quality
 - any limitations?

Before you start writing

- produce numerical examples
(or a proof of concept)
- produce images
- outline structure of paper
 - name sections
 - itemize content
 - add hand-drawn figures

Start writing

- have complete paper in your mind
- fill in contents (in meaningful order)
 - place images / figures
 - write sections
 - add more figures (reference all in text)
- proof-read your paper
 - does it sell / is it appropriate for event
 - check spelling / cross-references







Be aware of tools

- Use LaTeX for papers with equations
(no M\$ Formula Editor) LaTeX example:
<http://daddi.informatik.uni-kl.de/~bertram/seminar.tar>
- online documentations
<http://www.maths.tcd.ie/~dwilkins/LaTeXPrimer>
<http://www.giss.nasa.gov/latex/ltx-2.html>
<http://nwalsh.com/tex/texhelp/ltx-2.html>
- use style documents from conference
web page

More tools

- digital libraries
 - public (<http://citeseer.ist.psu.edu>)
 - ACM, IEEE dl's offer cheap access for students
 - papers often on authors' homepages
- online dictionaries (<http://dict.leo.org>)
- figures (xv, xfig, gimp, ...)
- spell checker (`aspell -c filename`)

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Structure of a paper

- abstract, introduction
- related work, background
- technical content ("the meat")
- numerical examples / results
- conclusions, acknowledgements (if any)
- references

Abstract

- 200-400 words (see cfp)
- main point of the paper
 - what (contribution)
 - how (brief summary of method + results)
- should tell reviewers whether it matches their expertise
- should tell so. whether to download pdf

Introduction / motivation

- problem statement (attention getter)
 - can already review some previous work
 - should motivate your claim
- claim
 - summarize your contribution
 - show why it is important
- preview the contents of your work
 - should motivate so. to read on...

Related work

- background if necessary
- summarize competing approaches
- differences wrt. your method
- again, mention your contribution

The “meat“

- motivate your approach by figures (can place teaser on front page)
- provide equations AND explanation in words
- be aware of addressed reader profile
- focus on important details
- move supplementary material to appendix

Results

- always provide examples
- comparison wrt. other methods
 - can you beat results from previous work?
 - compare to straight-forward method
- evaluate (qualitative, observations, ...)
- limitations + suggestion how to fix these

Conclusions

- short review of method (“tell ‘em three times“ – Ken Joy)
- achievements
- future work (unsolved problems, don’t tell all your secrets!)
- compare to abstract (and re-write latter)







Acknowledgements

- people who helped besides co-authors
- sources of
 - data sets
 - software packages
 - support of any kind
- your sponsors (thanks for the money, guys, was a lot of fun spending it...)

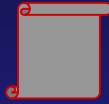
References

- use bibtex
 - takes care of formatting
 - shows only papers referenced in text
- for each paper
 - authors + *title*
 - conference / journal + vol + no. / booktitle + eds.
 - page numbers + year

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English writing



- English sentences are SHORT!
- be concise – omit unnecessary words
- think English – avoid translations
 - develop coarse structure in items
 - translate items into sentences
- use either American or British English (not both)

Modularization

- paragraphs
 - carry semantic units
 - never change topic within
 - split long paragraphs
 - avoid redundancy (only allowed between sections)
- sections / subsections as needed
 - no subsection x.1 without x.2!

Semantic flow

- smooth semantic structure
- consecutive sentences / paragraphs build on top of each other
- use examples and figures to explain complicated issues
- let the reader know
 - what you do next
 - why you are doing this

A few notes

- mostly use present, except
 - future work “will be directed at...”
 - previous work “MC was invented in 1987”
- say “we” (this includes the reader)
- never “,” before “that”!
- “-ing” is smoother than “that”:
 - “a method that provides good results”
 - “a method providing good results”







A few more notes

- avoid sloppy writing (in contrast to presentation where items are preferred)
 - “can´t” → “cannot”
 - “pros and cons” → “... kontras”
- introduce abbreviations BEFORE using them
 - “A multi-scale analysis (MSA) is defined as... We use multiple MSA´s ...”

Hyphenation

- overrides right associativity
 - “disabled user interface”
 - = user interface not active
 - “disabled-user interface”
 - = interface for impaired person
- often not unique, but use consistently
 - “coordinate” or “co-ordinate”

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Paper review

- finish paper well before deadline
- look at reviewers´ instructions for event
- review your own paper
- identify and improve weak points

- submit few days / hours before deadline (otherwise they think it´s not new)

Example review form

- summarize the paper
(sanity check to see whether the reviewer understood the paper)
- is the paper appropriate for event?
- does it advance the state of art?
(does it provide a significant, novel contribution?)
- is it easy or difficult to read?

Example review form (cont'd)

- is the paper well structured?
- is it technically sound?
- are important references missing?
- **do you recommend it for publication?**
- comments to authors
- comments to committee (authors can't see these)

Every grad student can review



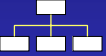



- volunteer for reviewing papers (see conference website)
- get a feeling why
 - good papers are rejected
 - sometimes bogus is published
 - how an accepted paper must look like
- reviews are anonymous (they can sue you only for stealing ideas, etc.)

Got a reject?

- take it easy! (got many of these)
- study reviews – are they adequate?
- did someone else publish your idea earlier? (if so, find differences)
- fix paper and submit elsewhere!

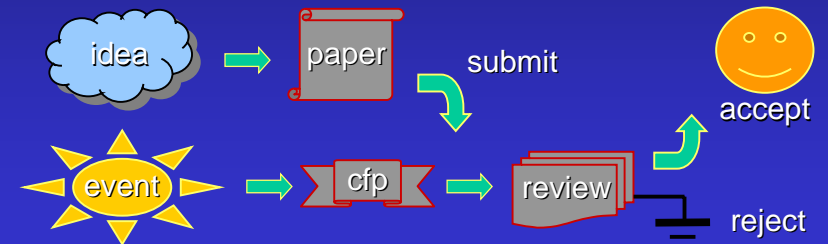
- a reject is sometimes better than a bad or faulty paper published!

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Summary

- understand the process
- be part of it!



Summary (cont'd)

- come up with a novel idea 
- find the proper event
- run experiments / compare
- put results into images
- place structure around them 
- fill in text 
- proof-read + submit  

That's all, Folks!

Thanks for your attention.

Questions?