Writing extended abstracts for NLP Conferences

A Brief Tutorial
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Who are we?

Vasundhara
- Speech Recognition Engineer @ Dialpad, BC, Canada
- 1 paper at PLOS One!
- Hardest part? *All of it?*
  
  *Introduction*

Sabrina
- 4th year PhD student @ JHU
- Papers at *CL confs & AAAI*
- Hardest part? *Coming up with good stories and motivations.*

...writing a paper is hard for all of us!
You want to write a paper on a topic.

...but what is that process? And how do you make it work?
Overview / Schedule

- Part A: Life of a Paper
  (20min pres. + 10min QA)
- Part B: Writing good extended abstracts
  (10min pres.)
- Final activity: peer review
  (10min in groups + 5min together/conclusion)
Part A

Life of a Paper
(\textit{Demystifying the process})

What's in a CfP?
Formatting and templates
Surviving LaTeX with Overleaf
Submitting to Softconf/OpenReview
The *CL anonymity period
Approaching reviewer feedback
Promoting/“nourishing” your paper
Why do you want to write a paper?

There are many good reasons: connecting to peers, attending conferences, teaching and learning something new (even if it's just for you!)... and, of course, advancing your career ;)

Fight that imposter syndrome!
The ACL-IJCNLP 2021 Call for Papers

https://2021.aclweb.org/calls/papers/
A typical CfP: Part 1/5
https://2021.aclweb.org/calls/papers/

- Updates
- General conference information
- Important dates
- Long turnaround times: workshop < conf < journal (excl. TACL)

...but it doesn’t stop there!
What kind of work fits here?

- **Conference tracks** decide who will review your paper

- **Reviewer** <-> **Area Chair** <-> **Senior Area Chair** <-> **Program Chair**...

- Sometimes: special tracks or focuses

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A typical CfP: Part 2/5

https://2021.aclweb.org/calls/papers/
A typical CfP: Part 3/5
https://2021.aclweb.org/calls/papers/

- What should papers look like?
  - Long, short, theme papers
  - Page limits
  - Appendices

- Rules/policies for paper writing
  - Anonymity period: ...keep the paper secret!
  - Double-blind review: ...keep your identity secret!

If you have any questions, please contact the program committee.
A typical CfP: Part 4/5
https://2021.aclweb.org/calls/papers/

● More policies...
  ○ Multiple submission
  ○ Ethics concerns
  ○ Reproducibility checklist
A typical CfP: Part 5/5

https://2021.aclweb.org/calls/papers/

- Formatting rules and templates!
  - Always use the template!
- Supplemental material
  - Allowed?
  - What types?
- Various other and contact info

**bonus idea: volunteering!**
(usually pays for conference, too!)
Paper submissions must use the official ACL-IJCNLP 2021 style templates, which are available as an Overleaf template and also downloaded directly (LaTeX and Word). Please follow the paper formatting guidelines general to *ACL conferences available* here. The templates themselves contain only specific notes (e.g., LaTeX notes in the .tex file).

Always use the provided templates---they are available on Overleaf for easy editing!
...writing time!

More on this in Part B of this tutorial!

Let’s say we have written the paper and want to submit it...
Submitting papers: Softconf

*CL conferences (ACL, NAACL, EMNLP, EACL,...) and most of their workshops use Softconf.

- Unstable
- Unreliable
- Ugly
- Complicated
- Smells funny
- Weird global and per-conference distinction
ICML, NeurIPS, AAAI, and others use Microsoft’s CMT3.

- A bit more complex, but still very usable
- Closed like softconf
Submitting papers: OpenReview

ICLR and related workshops use OpenReview.

- Easier
- (Usually) open to all for comment, (sometimes) public reviews
- ...use their anonymous preprint server to get paper read despite the anonymity period!
Preprint servers: arXiv

Non-anonymous server for:

- "pre-prints" (papers and drafts before publication for feedback)
- "post-prints" (to allow open access and get more visibility)

Not a conference, not peer-reviewed!

But still requires authorization through referral for submission---so probably not relevant just yet :)

The anonymity period: what's okay?

Not okay ❌:

- Posting a non-anonymous draft publicly (e.g., on arXiv)
- Posting about it on social media
- Linking the paper on your website

Okay ✔:

- Sending friends and collaborators drafts/papers (remember draft mode / \usepackage{draftwatermark}!)
- Presenting in closed venues (invited / department talks)
- Mentioning your work in informal chats

Ambiguous:

- Listing a paper as "under submission" on your CV (probably best not to do it publicly, but okay on job materials)
Reviews are in!

We got good scores/accepted!

- Next: camera-ready, the version of your paper that is ready for publication!
- Incorporate reviewer feedback, answer any questions, and add your names!

We got bad scores/rejected...

- That always sucks, especially early in your career. Happens to us all!
- Often your work wasn’t bad per se:
  - Papers might need more experiments or clearer “story”
  - Some reviewers miss crucial details: make sure the truth is inescapable!
- Next: rewrite and resubmit!
  - Important: if anything is “not clear,” improve clarity (you are biased)!

Author response/rebuttal: sometimes just re-explaining something with different terminology helps---don’t pick a fight! You can also notify Area Chairs.
...conference time!

Make slides (oral) or a poster to present! Yay!

Tip: talk to other people as much as possible about their experience of the process---you will learn a lot that is not on the poster or in the paper!
Important: “nourish” your paper!

Papers are communication: promoting them is important!

- Put in on your website/arXiv!
- Blog/tweet about it!
- E-mail peers: friends and (select) authors of related work
- Find enthusiastic senior people who know you to signal-boost (lab/department)!
- Publish open-source code!

Papers are communication: know your audience!
Part B
How to write a good extended abstract

The lightning talk analogy
Brevity is hard and brutal
Skeleton of a good abstract
Reverse-engineering the reader
General writing advice
Examples
What if you only had 5 slides? 5 tweets? 1 elevator ride?

A good extended abstract quickly tells a story — just like a five-minute talk!
The extended abstract is short.

In the same way that a 5 minute talk is a “harder” format than a 15 minute talk, an extend abstract is “harder” than a full paper because you have to tell a compelling story fast.

You CANNOT share everything you want.

Common failure mode: too much background work---like if you have a big intro paragraph and a big related work paragraph before getting into what you’re doing... good luck...
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You CANNOT share everything you want.
Skeleton of an extended abstract

<table>
<thead>
<tr>
<th>Section</th>
<th>Key Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>● Contextualize the problem</td>
</tr>
<tr>
<td></td>
<td>● No abstract, generally</td>
</tr>
<tr>
<td>Related work</td>
<td>● Only directly relevant background</td>
</tr>
<tr>
<td></td>
<td>● Explain the novelty</td>
</tr>
<tr>
<td>Methods / models / data</td>
<td>● Replication is not the goal</td>
</tr>
<tr>
<td>Experimental results</td>
<td>● One central number / insight / takeaway</td>
</tr>
<tr>
<td>Conclusion</td>
<td>● Reinforce takeaway</td>
</tr>
<tr>
<td></td>
<td>● Link back to problem</td>
</tr>
</tbody>
</table>
Most people do not read a paper: they skim it.

Knowing what a reader does (Figure 1--Introduction--Results table--Conclusion) helps you design your paper to make sure they get the most important information that way!
Consequence: common rules

Get to the point ASAP. Don’t write a diary, focus on final result.

No plot twists---tell the reader about the murderer from the start!

Highlight main results: not everything will fit, but you should have something (qualitative results are results!)

Don’t go too deep into technical details (in an extended abstract)! Pick your notation and abbreviations deliberately (only what helps)!

Pay attention to the “flow”: jumping back and forth and re-explaining things constantly wastes space and attention.
Rewrite, rewrite, rewrite.

Your 1\textsuperscript{st} draft will be long---way too long---some things will work, some won’t!

2\textsuperscript{nd} ... pass: rewrite it from memory/from scratch---don’t copy-paste yet!
(You will remember the things that worked and fill in better replacements for the things that didn’t :)

n\textsuperscript{th} pass: cut things down.
Other more practical tips

- **Use LaTeX**
  - Overleaf and check out git
  - Most people know barely enough to get by! Don’t go too deep!
  - \texttt{\textbackslash usepackage\{booktabs,todonotes\}}

- **Don’t use pixel images, prefer PDFs!**
  - Good: PDF export from Excel or Powerpoint
  - Better: learn to use plotting tools like Matplotlib or Altair
  - Best: use Inkscape or Adobe Illustrator

- **Distinguish in-text and parenthetical citations... and all the other small things the ACL template tells you to do!**

Also summarized at [https://acl-org.github.io/ACLPUB/formatting.html](https://acl-org.github.io/ACLPUB/formatting.html)!
Further resources

- Resource page on extended abstracts for Black in AI: https://rabeshi.github.io/blackhelp/
- Reverse outlining: https://writing.wisc.edu/handbook/process/reverseoutlines/
- Opinionated ACL defaults and finer-grained template: https://twitter.com/complingy/status/1365332225605124099
- Other resources on academic writing:
  - https://www.cs.jhu.edu/~jason/advice/
  - http://users.umiacs.umd.edu/~jbg/static/style.html
“Review” an extended abstract!

We won’t do formal peer review---instead try to relate what you’ve learned today to the abstracts!

What did the authors do well?
How could they have improved?
What do you want to learn about next?

...and do you have feedback for us about this tutorial?
We’d like to see what worked and what didn’t yet!
Feedback and Thanks

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