Computational Linguistics Lab: How to write a paper critique

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Outline:

- What makes a good paper?
- Why are paper critiques important?
- Stepwise instruction to write a paper critique.

- Let’s do a critique together!
  - Guidelines for paper review
What makes a good paper? (project report, thesis)

✓ Good papers contain something of merit...
✓ ... and well presented through a logical structure

1. Abstract
   SUMMARY of the paper: statement of the original problem and conclusions

2. Introduction
   Detailed DESCRIPTION of the approach. ANALYSIS of results, and discussions of errors

3. Body of the paper (techniques, results, discussions)
   Detailed DESCRIPTION of the approach. ANALYSIS of results, and discussions of errors

4. Conclusions

5. References
   All the previous works that are significant for the topic

6. Tables

7. Figures

Why is the topic important?

Don’t introduce new material!

Better present the experiments, data. Be clear!

13.10.2010 - Computational Linguistics Lab: How to write a paper critique (3)
Why are paper critiques important?

**FOR THE AUTHOR**

To receive feedback on:
- the understandability of the topic as it is expressed
- the value of the work
- possible improvement of the work

**IN SCIENTIFIC CONFERENCES**

- maintain academic integrity
- reward valuable/interesting works

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13.10.2010 - Computational Linguistics Lab: How to write a paper critique (4)
The importance of high-profile reviewers...
Why are paper critiques important?

FOR THE REVIEWER

- To exercise a critical attitude towards research papers
- To help understanding a difficult topic
- To know about work done by other people on topics you are interested to
- To get new ideas for possible research directions, future work

MAKE IT A CONSTRUCTIVE TASK!
Stepwise instructions to write a paper critique:

1. Read the paper straight through without marking a word: pay attention to the CONTENT.
2. Back to the INTRODUCTION: Focus on the problem and the writer's solution (THESIS).
3. Read the BODY of the paper, paragraph by paragraph...
4. Does her reasons support her thesis? Enough evidences?
5. Check GRAMMAR and SPELLING.
6. Read the CONCLUSIONS. Does they tie together the paper or end weakly?
7. Look at the CITATIONS.

OVERALL CRITIQUE
Let’s try together!

Aurlien Max, Guillaume Wisniewski, “Mining Naturally occurring Corrections and Paraphrases from Wikipedia’s Revision History”

Guidelines for paper review:

- **Paper description:**
  - Summary of the paper, key ideas
  - What are the main contributions?

- Why do you like this work?
- Why do you dislike this work?
  - Serious technical mistakes
  - Isn’t novel (provide related work/papers)
  - Doesn’t demonstrate all its point by proofs, simulations, experiments
  - Makes unreasonable assumptions

- Detailed comments on the paper
  - What did you learn reading the paper?
  - What are the technical things you appreciated?
Guidelines for paper review (cont.):

- Comments on their references & related work:
  - How does the paper relate with others works/projects/papers?
  - Which of them have been cited and which you know that are related but have not been references by the authors?

- Comment its presentation style:
  - Does the paper describe clearly its goals?
  - Did the paper deliver what originally promised?
  - What were the motivations (what issues/problems inspired this research), assumptions (of the setting, requirements), contributions?
  - Is the bibliography format/list of keywords complete?
  - Are the figures readable? Can you see the trend? Do they explain the trend or “strange behaviour”? Do the results in the figures make sense?
  - List any writing style remarks/corrections (english grammar, syntax,...)
Guidelines for paper review (cont.):

- Make concrete suggestions for how to improve the paper
- Do you have any unanswered questions on the paper?
- What would be good follow-on projects and why?
BIBLIOGRAPHY:

- Guidelines for paper review
  http://www.ics.forth.gr/mobile/paper_review.html
- How to review a technical paper
- How to critique a Research Paper
  http://www.ehow.com/how_4885835_cri critique-research-paper.html
- D.J. Benos, K.L. Kirk, J.E.Hall, How to review a paper
  http://advan.physiology.org/cgi/content/full/27/2/47
- J.F. Polak, The role of the manuscript reviewer in the peer review process
  http://www.ajronline.org/cgi/content/abstract/165/3/685