

Survey on paper-reviewer assignment for Area Chairs/Action Editors

...

* Required

1. This survey is a part of a research project at the University of Copenhagen on paper-reviewer matching in Computational Linguistics (CL) and Natural Language Processing (NLP).

The goal of this survey is to identify the current practices of making paper-reviewer assignments in CL/NLP conferences and ways in which this process can be improved. Your response is fully anonymous and will be used for research purposes only. Responses may be shared in anonymous form with other researchers for related studies.

Do you consent to these terms? *

- ☐ I consent, begin the survey
- ☐ I do not consent, end the survey

Next

Page 1 of 8

Survey on paper-reviewer assignment for Area Chairs/Action Editors

...

* Required

2. For the purposes of this survey, we are interested in hearing from researchers at various career stages, but the survey assumes that you have served as an Action Editor or an Area Chair in the field of CL/NLP at least once in the last three years (2019-2021).

Does this apply to your situation? *

- ☐ Yes, I have served as an Area Chair / Action Editor at a CL/NLP venue in 2019-2021
- ☐ End the survey: I have not recently served as an Area Chair / Action Editor at CL/NLP venues

Back

Next

Page 2 of 8

* Required

Your background

3. What is the best description of your current career status? *

- ☐ Undergraduate/Bachelor's student
- ☐ Graduate/Master's student
- ☐ Graduate/PhD student
- ☐ Postdoc
- ☐ Academic researcher
- ☐ Industry researcher
- ☐ Independent researcher
- ☐ Other

4. What kinds of contributions do you make in your work? Check all types of work that you have performed.

If you are not sure, an explanation of different paper types is available here:

<http://coling2018.org/paper-types/> * 

- ☐ Computationally-aided linguistic analysis
- ☐ NLP engineering experiment paper
- ☐ Reproduction paper
- ☐ Resource paper
- ☐ Position paper
- ☐ Survey paper
- ☐ Other

5. How many times have you had your own paper peer-reviewed for a CL/NLP venue? *

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ more than 10 times

6. How many times have you served as a reviewer for CL/NLP venues? *

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ more than 10 times

7. How many times have you served as an Area Chair/Action Editor for CL/NLP venues? *

- ☐ 0
- ☐ 1-5
- ☐ 6-10
- ☐ more than 10 times

8. For what venues have you served as Area Chair/Action Editor? Check all that apply. *

- ☐ *ACL conference (ACL, EMNLP, NAACL, EACL, AACL)
- ☐ a satellite *ACL event: WMT, CoNLL, *SEM, SemEval, workshops
- ☐ ACL rolling review
- ☐ a CL/NLP journal (e.g. TACL, CL)
- ☐ a different CL/NLP conference (e.g. COLING, LREC)
- ☐ a machine learning conference (e.g. NeurIPS, ICLR, ICML)
- ☐ other

Back

Next

Page 3 of 8

* Required

Your most recent experience as an Area Chair / Action Editor

9. When did you last serve as an Area Chair/Action Editor for an CL/NLP venue?

*

- ☐ 2021
- ☐ 2020
- ☐ 2019
- ☐ earlier than 2019

10. For what venue did you last serve as Area Chair/Action Editor? *

- ☐ *ACL conference (ACL, EMNLP, NAACL, EACL, AACL)
- ☐ a satellite *ACL event: WMT, CoNLL, *SEM, SemEval, workshops
- ☐ ACL rolling review
- ☐ a CL/NLP journal (e.g. TACL, CL)
- ☐ a different CL/NLP conference (e.g. COLING, LREC)
- ☐ a machine learning conference (e.g. NeurIPS, ICLR, ICML)
- ☐ other

11. Were you also an author of at least one submission to the same venue? *

- ☐ yes
- ☐ no

12. Approximately how many submissions where you assigned the last time you served as an Area Chair/Action Editor?

*

Select your answer



Back


Next

Page 4 of 8



	Tasks	Method	Data	Type of paper	Affinity score	Bidding	Trust
AC / Action Editor	3.90	3.70	2.83	3.37	2.13	3.67	3.27
Reviewer	4.00	3.86	2.75	3.16	1.97	4.03	2.96
Author	3.95	3.59	2.84	3.45	1.85	3.86	3.11
Grand mean	3.95	3.72	2.81	3.32	1.99	3.85	3.11

Table 3: Mean importance with 0=Not sure, 1=Not important, 2=Slightly important, 3=Moderately important, 4=Very important and 5=Extremely important, for the seven paper-reviewer matching factors shown in [fig. 8](#). Removing "Not sure" does not change the overall ranking. The mean absolute difference is greatest between ACs and reviewers (0.20) and smallest between ACs and authors (0.12), while between reviewers and authors it is 0.16.

 Survey on paper-reviewer assignment for Area Chairs/Action Editors

* Required

How did it go?

13. Consider the last time you served as an Area Chair / Action Editor at a CL/NLP venue. If you were asked to check paper-reviewer assignments and/or to suggest reviewers, how satisfied were you with the support provided to you to improve the paper-reviewer matching? *

☐ Very satisfied
☐ Somewhat satisfied
☐ Neither satisfied nor dissatisfied
☐ Somewhat dissatisfied
☐ Very dissatisfied
☐ N/A (I was not asked to assist with paper-reviewer matching)

14. Given your experience with CL/NLP conferences in the recent years, would you say your most recent as an Area Chair / Action Editor experience with paper-reviewer matching, described above, was better or worse than average? *

☐ It was better
☐ It was average
☐ It was worse
☐ Not sure
☐ N/A (this was the first time I served as an Area Chair / Action Editor)

Back

Next

Page 5 of 8

* Required

What were the issues, if any?

15. Consider your most recent experience as an Area Chair / Action Editor for a CL/NLP venue. If there were any issues impacting the possibility of good paper-reviewer matches, what were they? Check all that apply. If there were none, please indicate that.

*

- ☐ There were not enough qualified reviewers in the pool
- ☐ There was not enough time to ensure good matches for all papers
- ☐ Not enough information about reviewers was provided to facilitate the paper-reviewer matching
- ☐ The interface that had to be used in the matching process was clunky, making the process take more time than needed
- ☐ The other organizers did not respond to your messages in reasonable time
- ☐ The reviewers did not respond to your messages in reasonable time
- ☐ Too many reviewers refused their assignments
- ☐ Other
- ☐ There were no issues

16. If you have had other issues the last time you served as an Area Chair / Action Editor, what were they?

Please refrain from providing details that could identify specific papers.

Enter your answer

17. If you have served as an Area Chair / Action Editor for a CL/NLP venue before your most recent assignment, what issues impacting the possibility of good paper-reviewer matches have you experienced before? Check all that apply. If you have not had any issues, or this question is not applicable to you, please indicate that.

*

- ☐ There were not enough qualified reviewers in the pool
- ☐ There was not enough time to ensure good matches for all papers
- ☐ Not enough information about reviewers was provided to facilitate the paper-reviewer matching
- ☐ The interface that had to be used in the matching process was clunky, making the process take more time than needed
- ☐ The other organizers did not respond to your messages in reasonable time
- ☐ The reviewers did not respond to your messages in reasonable time
- ☐ Too many reviewers refused their assignments
- ☐ Other
- ☐ I have never had any issues
- ☐ N/A (this was the first time I served as an Area Chair / Action Editor OR I was not asked to check paper-reviewer matches)

18. If you have had other issues when serving as an Area Chair / Action Editor (apart from your most recent experience discussed above), what were they?

Please refrain from providing details that could identify specific papers.

Enter your answer

Back

Next

Page 6 of 8

* Required

How was the paper-reviewer matching done?

Different venues use different methods to assign papers to reviewers. Some of the common methods include:

- *bidding phase*: the reviewers are shown a list of submissions and are asked to enter their preferences, which are then taken into account in the assignment.
- *automated matching* based on similarity scores: a system computes some representation for the submission and the reviewer profile, based on their previous publications, and outputs similarity scores for submissions and candidate reviewers.
- *manual checks* by the chairs: the area chairs manually check the potential reviewer profiles and try to find the optimal matches.

19. Consider the last time you served as an Area Chair / Action Editor. What was the method used for assigning reviewers to submission?

*

- ☐ Reviewers were assigned manually by Area Chair / Action Editor
- ☐ Reviewers were assigned based on the bidding information
- ☐ Reviewers were assigned automatically (based on similarity scores)
- ☐ Reviewers were assigned randomly (given conflicts of interest and review quotas)
- ☐ Reviewers were assigned based on both automated similarity scores and manual checks
- ☐ Reviewers were assigned based on both bidding information and manual checks
- ☐ Other method

20. Consider the last time you served as an Area Chair / Action Editor. If that venue requested you to check or provide paper-reviewer matches, what kind of information about candidate reviewers was provided to you? Please check all that apply. *

- ☐ Reviewer name and affiliation
- ☐ Automated similarity scores
- ☐ Similarity scores supplemented with automated explanations of the scores (e.g. based on interpretability techniques)
- ☐ Links to reviewer profiles (e.g. in Google or Semantic Scholar)
- ☐ Summary information about reviewer seniority (e.g. number of publications, career status)
- ☐ Summary information about areas of expertise (e.g. keywords)
- ☐ Information about languages spoken by the reviewers
- ☐ Summary information about the research methods the reviewer is familiar with
- ☐ Whether the reviewer has shown interest in reviewing the paper (through bidding)
- ☐ Reviewer history (e.g. number of reviews, experience that other chairs had with this reviewer, etc.)
- ☐ Other
- ☐ N/A (I was not asked to check paper-reviewer matches)

21. At the venues that at least partially rely on manual checks of paper-reviewer matches, the Area Chairs/Action Editors may be presented with different types of information to assist with the matching. In your experience in the recent years, how useful did you find the following types of information? (choose "Never provided" if you do not recall being presented with a certain type of information).

*

	Not at all useful	Not very useful	Fairly useful	Very useful	Not sure	Never provided
Automated similarity scores	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Similarity scores supplemented with automated explanations of the scores (e.g. based on interpretability techniques)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Links to reviewer profiles (e.g. in Google or Semantic Scholar)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summary information about reviewer seniority (e.g. number of publications, career status)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summary information about areas of expertise (e.g. keywords)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information about languages spoken by the reviewers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Summary information about the research methods the reviewer is familiar with	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reviewer has shown interest in reviewing the paper (through bidding)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Information about the experience other area chairs had with this reviewer (e.g. number of reviews, best reviewer nominations etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

22. If you have been presented with other information, not listed above, please describe it here and indicate whether it was useful.

Enter your answer

Back

Next

Page 7 of 8

 Survey on paper-reviewer assignment for Area Chairs/Action Editors

...

* Required

How should the paper-reviewer matching be done?

23. Most CL/NLP conferences receive high volumes of submissions, which makes it impractical to perform paper-reviewer matching manually. Given that, which of the following options would you as an Area Chair / Action Editor consider the best for assigning reviewers to conference submissions? *

- ☐ Reviewers should be assigned manually by area chairs / action editors
- ☐ Reviewers should be assigned based on the bidding information
- ☐ Reviewers should be assigned automatically (based on similarity scores)
- ☐ Reviewers should be assigned randomly (given conflicts of interest and review quotas)
- ☐ Reviewers should be assigned based on both automated similarity scores and manual checks
- ☐ Reviewers should be assigned based on both bidding information and manual checks
- ☐ Other method

24. Is there a better alternative for paper-reviewer matching that was not listed in the above options? If so, please describe it.

Enter your answer

25. If you could choose what information about candidate reviewers would be provided for your next Area Chair / Action Editor role to improve paper-reviewer matching, what would it be? Please check all that apply. *

- ☐ Reviewer name and affiliation
- ☐ Automated similarity scores
- ☐ Similarity scores supplemented with automated explanations of the scores (e.g. based on interpretability techniques)
- ☐ Links to reviewer profiles (e.g. in Google or Semantic Scholar)
- ☐ Summary information about reviewer seniority (e.g. number of publications, career status)
- ☐ Summary information about areas of expertise (e.g. keywords)
- ☐ Information about languages spoken by the reviewers
- ☐ Summary information about the research methods the reviewer is familiar with
- ☐ Whether the reviewer has shown interest in reviewing the paper (through bidding)
- ☐ Reviewer history (e.g. number of reviews, experience that other chairs had with this reviewer, etc.)
- ☐ Other

26. If there are other kinds of information about candidate reviewers that you would like to be provided, but that are not listed above, please describe them here:

Enter your answer

27. If you have one week for paper-reviewer matching of a batch of submissions, what will be **your** optimal number of submissions in that batch?

*

Select your answer



28. How important do you think the following factors are for making a good paper-reviewer match?

*

	Not at all important	Slightly important	Moderately important	Very important	Extremely important	Not sure
The reviewer has worked on the same type of task(s) as the paper (e.g. hate speech detection, machine translation etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reviewer has worked with the same methods (e.g. a class of ML models, a type of linguistic analysis, crowdsourcing etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reviewer has worked with the same (or similar) data	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reviewer has published the same types of papers (e.g. linguistic analysis paper, engineering experiment paper, reproduction paper, resource paper, position paper, survey paper).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The automated similarity score is high	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The reviewer has shown interest in reviewing the paper (through bidding)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know the reviewer professionally and trust them to write a good review	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

You can print a copy of your answer after you submit

Back

Submit

Page 8 of 8