Reviewer’s report

Title: Novel Citation-Based Search Method for Scientific Literature: A Validation Study

Version: 0 Date: 13 Aug 2019

Reviewer: Erjia Yan

Reviewer's report:

This is a clearly written paper. I have reviewed dozens of bibliometric studies in the past and found this paper to be one of the most well-articulated. My main issue with this paper is that the ideas and the implementations of using co-citation and citation to identify key literature is nothing new. Google Scholar use citations in combinations of keywords to provide users with relevant results. CiteSeer is another successful system that takes advantage of citation and co-citation relations. WoS also has a cited references search function. So I do not see how the proposed search method is different from existing systems. Second, although the paper included clear reports of results, I fail to see any cross-system evaluations. In the context of information retrieval system evaluations, at least one baseline method should be used to benchmark the proposed system. Baseline evaluations make the numbers (75%, 88%, etc.) more meaningful. There is no such evaluation in the current paper. I suggest the authors to add one or two baselines in the evaluation. Third, one key concept the authors stated is search efficiency. Sometimes a good match score is only halfway to secure efficiency. I wonder if the authors are planning to conduct a user-centered evaluation of CoCites to see if users find it efficient. That will be a more compelling result to show.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes
Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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