Dear Editors:

We would like to submit our research article entitled “Exploiting Publication Contents and Collaboration Networks for Collaborator Recommendation”, which we wish to be considered for publication in “PLOS ONE”. No conflict of interest exits in the submission of this manuscript, and manuscript is approved by all authors for publication. I would like to declare on behalf of my co-authors that the work described was original research that has not been published previously, and not under consideration for publication elsewhere, in whole or in part. All the authors listed have approved the manuscript that is enclosed.

In academia, researchers with the same or similar research direction usually collaborate to discuss scheme, design experiments, write papers, etc. Recently, due to the proliferation of online social networks, it has become conventional for researchers to communicate and collaborate with each other. However, another problem arises. That is, how to find the most relevant and potential collaborators for each researcher. In this work, we propose a novel recommendation model called CCRec, which combines the information on researchers' publications and collaboration network to generate better collaborator recommendation. In order to effectively identify the most potential collaborators for researchers, we adopt a topic clustering model to identify the academic domains, as well as a random walk model to compute researchers' feature vectors.

Using DBLP data sets, we conduct benchmarking experiments to examine the performance of CCRec. The experimental results show that CCRec outperforms other state-of-the-art methods in precision, recall and $F1$ score.

This is the first time we submit this manuscript to PLOS ONE. There are no prior interactions with PLOS ONE regarding this manuscript.

There are several related works for academic collaboration recommendation. Two of the most recent publications that are relevant to this work are list below, which use conceptually different algorithm. Note that we use the same data sets from these two papers to demonstrate the effectiveness of our method.

*Li J, Xia F, Wang W, Chen Z, Asabere NY, et al. (2014) Acrec: a co-authorship based random walk model for academic collaboration recommendation. In: Proc. WWW. pp. 1209–1214.*

*Xia F, Chen Z, Wang W, Li J, Yang LT (2014) Mvcwalker: Random walk based most valuable collaborators recommendation exploiting academic factors. IEEE Trans Emerg Top Comput 2:285 364-375.*

We hope that the manuscript meets the high standards of your journal. We are looking forward to receiving a favorable response from you regarding the acceptance of our manuscript. If you have any queries, please don’t hesitate to contact me at the address below.

Sincerely yours.

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