

Response Letter

Title: A Joint Summarization and Pre-trained Model for Review-based Recommendation

Authors: YI BAI, YANG LI and LETIAN WANG

On behalf of my co-authors, I am submitting the enclosed paper "A Joint Summarization and Pre-trained Model for Review-based Recommendation" for the consideration of publication in MDPI Information. This is a revised manuscript for our previous submission.

The authors would like to thank the handling editor and the anonymous reviewers for their valuable and constructive comments. In this version, we have carefully revised the previous submission according to the suggestions raised by the associated editor and all the reviewers. We have modified the symbols that may cause ambiguity in the article. We also added a more detailed description of the unclear points in our method. At the same time, we supplemented the references.

To Reviewer #1

Major comments:

1. r_u and r_i occur confusion. These two different elements must be given different notation. If not, we do not know which definition when we say r_1 , for example. As well, C_u and C_i , S_u and S_i , e_i and e_u , and some other pairs are not suitable.

[authors] *We thank the reviewer for this comment. We modified the notations in our method and showed the notations in Table 1. We add superscripts to the symbols to distinguish the symbols on the user side and the item side.*

2. I did not know how the values of S_i and S_u are calculated. This seems to be a crucial point in the review summarization layer and your BERT representation layer.

[authors] *Thanks for the comment. For each review $rw_{u,j}^{user}$, we calculate the importance of each sentence in the $rw_{u,j}^{user}$ through the TextRank method, and then select the most important K sentences as summary $s_{i,j}^{item}$. K can be obtained by $\mu \times |rw_{u,j}^{user}|$, where μ is the proportion of the review summary and $|rw_{u,j}^{user}|$ is the number of sentences in the review. Similarly, for each item review $rw_{i,j}^{item}$, the summary is calculated in the same way.*

We have a detailed description of how to calculate S_u and S_i in the lines of 113-117 in Section 2.1.

3. The function `relu` is not defined yet in calculating an attention score.

*[**authors**] Thanks for the comment. We have added the explanation and definition of ReLU function in Section 2.3.*