Assessing the Significance of Incorporating User Profiles in Social Book Search

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Abstract

In this article, it is hypothesized that personalizing the book search application by incorporating user profiles such as background of personal tastes, interests and previously seen books, can issue or produce a more effective query result set as well as an effective book recommendation. To meet this end, experiments were carried out to explore which topic representation gives the best result. Four different query representations, which are title, request, group and a combination of title-request-group were used. It was observed that the title-request-group query representation was best. In addition, an investigation was conducted to determine whether a learning to rank framework that incorporates topical relevance by exploiting user profiles for document re-ranking according to individual preference will issue a more effective result set. Moreover, an investigation was conducted to determine whether the use of keywords from profiles for query expansion and reformulation improves the search results. The results of these investigations suggest that a more effective query result set as well as an effective book recommendation can be attained by incorporating user profiles such as background of personal
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tastes, interests and previously seen books into the social book search application.

References

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