

Search Refinement through User Interests: A Case Study in Medical Research

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Abstract

Search has a major problem to solve under the context of the Web-scale data. In many cases, a user may submit an incomplete or a vague query, and query results relevant to the incomplete search will be too much for user inspection, and it will definitely require more processing time to obtain a satisfying answer. Nevertheless, user queries are usually much related to the users' historical information, such as researchers' publication information, Web pages access log, etc. In this study, based on the study of cognitive memory retention, we developed 3 interest retention models to track the dynamic user interests and we add the tracked interests as constraints to rewrite the SPARQL query. In order to illustrate our idea, we take the Medline dataset as a data source. Experimental results show that in this way, the rewritten query can get more relevant search results to specific researchers.

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