

Leveraging Quality Metrics in Voting Model Based Thread Retrieval

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Abstract : Seeking and sharing knowledge on online forums have made them popular in recent years. Although online forums are valuable sources of information, due to variety of sources of messages, retrieving reliable threads with high quality content is an issue. Majority of the existing information retrieval systems ignore the quality of retrieved documents, particularly, in the field of thread retrieval. In this research, we present an approach that employs various quality features in order to investigate the quality of retrieved threads. Different aspects of content quality, including completeness, comprehensiveness, and politeness, are assessed using these features, which lead to finding not only textual, but also conceptual relevant threads for a user query within a forum. To analyse the influence of the features, we used an adopted version of voting model thread search as a retrieval system. We equipped it with each feature solely and also various combinations of features in turn during multiple runs. The results show that incorporating the quality features enhances the effectiveness of the utilised retrieval system significantly.

Keywords : content quality, forum search, thread retrieval, voting techniques

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