

Query Expansion for Document Retrieval by Mining Additional Query Terms

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Abstract

In this paper, we present a new query expansion method for document retrieval by mining additional query terms. The proposed query expansion method uses the vector space model to represent documents and queries. It uses the degrees of importance of relevant terms for finding additional query terms and uses fuzzy rules to infer the weights of the additional query terms. Then, these additional query terms and the original query terms are used to retrieve documents for improving the performance of information retrieval systems. The proposed query expansion method increases the precision rates and the recall rates of information retrieval systems for dealing with document retrieval.

Keywords: Document Retrieval, Fuzzy Rules, Information Retrieval, Query Expansion, Query Terms.