

# Abstract

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## **Approximating User's Intention For Search Engine Queries**

The amount &#97;&#110;&#100; variety of documents available on the internet today is overwhelming. These documents are not organized in a way that eases search &#97;&#110;&#100; retrieval by users using search engines. Although search engines are providing a very valuable mean for searching the web, the majority of them are term-based. Documents with the best answers to a user's query may not necessarily contain the terms used in the original query hence they would not appear on top of the search results. The user of the search engine is typically overwhelmed by the size of the returned result &#97;&#110;&#100; do not normally look beyond the first few pages of result. This information retrieval problem is caused by two issues: (1) query articulation issue where the user is not capable of expressing his information need well, &#97;&#110;&#100; (2) semantic gap issue where the search engine may not be able to retrieve semantically relevant documents. In this paper we introduce a solution that addresses these issues through semantic enrichment &#97;&#110;&#100; query reformulation. Our solution approximates the user's intention in order to return better search results. Experiments show significant enhancement in search results over traditional keyword-based search engines' results &#97;&#110;&#100; over a ed semantic search engine.