Abstract

Clustering is important task for any recommendation system. Clustering method suggested by many researchers for search engine optimization. Search engine help user for better searching by user’s query recommendation. Clustering is helpful for finding actual relation between different queries which are not same as they seems. But do clustering of user query is also a difficult task because of user enters lots of type and varying queries. Many time these queries may very short to get their real meaning and also can generate different meanings. Any single query may have various meaning on other hand many different query words may have common meaning for searching contents. Lots of clustering methods are given in last decades for search engine optimization but these methods unable to proper utilization various information hidden in user query log. This paper gives a novel clustering approach based on to identify query similarity and apply SOM clustering for effective clustering results. We propose a novel similarity matrix for user queries by uses of URL clicked by user through searching results. Text similarity and time similarity are also measure for calculating similarity between two queries. This method shows good results within clustering performance to compare with other existing methods.
Top-K Search Query Grouping using SOM Clustering for Search Engine

- Dr. G. K. Gupta, "Introduction to Data Mining with Case Studies", PHI Publication, 2005.


J. Yi and F. Maghoul, "Query Clustering Using Click-through Graph," Proc. the 18th Int'l Conf. World Wide Web (WWW '09), 2009.


**Index Terms**

Computer Science  
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**Keywords**

Query Logs  
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