Retrieval Effectiveness of News Search Engines: A Theoretical Framework

International Journal of Computer Applications
Foundation of Computer Science (FCS), NY, USA

Volume 180
Number 38

Year of Publication: 2018

Authors:
Mohammad Ubaidullah Bokhari, Mohd. Kashif Adhami

Abstract

News search has now become an important internet activity as users are switching from hard copies to online news reading. Many modern news search engines like: Google News or Bing News are available for this purpose. We propose a theoretical framework for evaluating the retrieval effectiveness of news search systems. The framework exploits supervised machine learning approach for evaluating therefore we performed retrieval effectiveness tests on a small data set consisting relevancy features- Tfidf and Latent Semantic Indexing (LSI) as well as freshness feature-publication time, extracted from 1120 query-document pairs collected from search results of Google News, to evaluate the performance of various machine learned learning to rank algorithms on NDCG and ERR metric at different cut-offs. The motive behind this work is to conduct large-scale retrieval effectiveness studies for news search engines.

References

1. Lewandowski, D., 2013. Evaluating the retrieval effectiveness of web search engines


Retrieval Effectiveness of News Search Engines: A Theoretical Framework


Index Terms

Computer Science

Information Sciences

Keywords

Learning to rank algorithms, ranking model, News search engine, News search quality.