

Robust Ad-hoc Retrieval Experiments with French and English at the University of Hildesheim

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Abstract

This paper reports on experiments submitted for the robust task at CLEF 2006 ad intended to provide a baseline for other runs for the robust task. We applied a system previously tested for ad-hoc retrieval. Runs for mono-lingual English and French were submitted. Results on both training as well as test topics are reported. Only for French, positive results above 0.2 MAP were achieved.

Categories and Subject Descriptors

H.3 [Information Storage and Retrieval]: H.3.1 Content Analysis and Indexing; H.3.3 Information Search and Retrieval; H.3.4 Systems and Software

General Terms

Measurement, Performance, Experimentation

Keywords

Multilingual Retrieval, Robust Retrieval, Evaluation Measures

1 Introduction

We intended to provide a base line for the robust task at CLEF 2006. Our system applied to ad-hoc CLEF 2005 data (Hackl et al. 2005) is an adaptive fusion system based on the MIMOR model (Mandl & Womser-Hacker 2004). For the base line experiments, we solely optimized blind relevance feedback (BRF) parameters based on a strategy developed by Carpineto et al. (Carpineto et al. 2001). The basic retrieval engine is Lucene.

2 System Setup

Two runs for the English and two for the French monolingual data were submitted. The results for both test and training topics are shown in table 1 and 2, respectively.

Table 1. Results for Submitted Monolingual Runs

<i>Run</i>	<i>Language</i>	<i>Stemming</i>	<i>BRF</i> <i>(docs. - terms)</i>	<i>GeoAve</i>	<i>MAP</i>
uhienmo1	English	Lucene	5-30	0.01%	7.98%
uhienmo2	English	Lucene	15-30	0.01%	7.12%
uhifrm01	French	Lucene	5-30	5.76%	28.50%
uhifrm02	French	Lucene	15-30	6.25%	29.85%

Table 2. Result for Training Topics for Submitted Monolingual Runs

<i>Run</i>	<i>Language</i>	<i>Stemming</i>	<i>BRF</i> <i>(docs. - terms)</i>	<i>GeoAve</i>	<i>MAP</i>
uhienmo1	English	Lucene	5-30	0.01%	7.16%
uhienmo2	English	Lucene	15-30	0.01%	6.33%
uhifmo1	French	Lucene	5-30	8.58%	25.26%
uhifmo2	French	Lucene	15-30	9.88%	28.47%

Only the runs for French have reached a competitive level of above 0.2 MAP. The results for the geometric average for the English topics are worse, because low performance for several topics leads to a sharp drop in the performance according to this measure.

3 Future Work

For future experiments, we intend to exploit the knowledge on the impact of named entities on the retrieval process (Mandl & Womser-Hacker 2005) as well as selective relevance feedback strategies in order to improve robustness (Kwok 2005).

References

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