

Round 4 results — Run Marouane\_QQ\_EnM-BTN submitted from Marouane

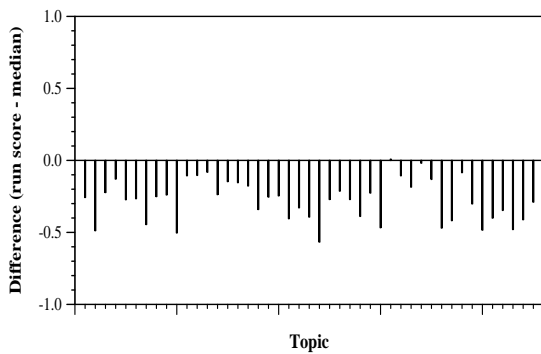
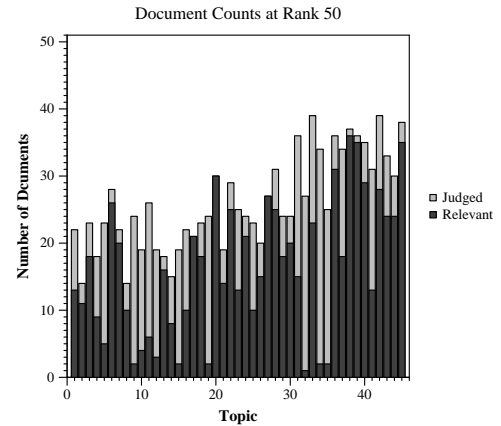
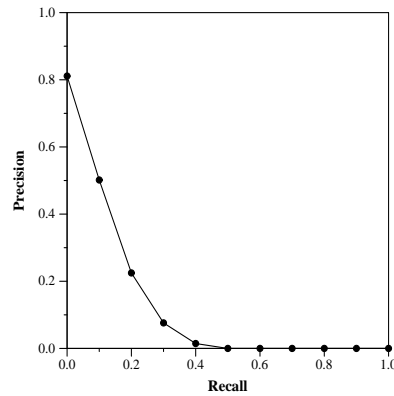
Run Description

In this run we rank the documents using Ensemble Model (EnM),  $EnM = 0.38 * BM25 + 0.34 * TFIDF + 0.28 * NMF$ . We train/rank on a small subset (#Papers 18674, #Tokens 24909), papers published after 2019-12, containing PMC parsed file Please see the [1](7.2 Coherence) to see why we are using NMF. NMF stands for Non-negative Matrix Factorization. We use Query+Question. [1] <https://www.kaggle.com/atmarouane/covid-19-search-engine-indexing-by-lda-enm> [2] Indexing by Latent Dirichlet Allocation and Ensemble Model

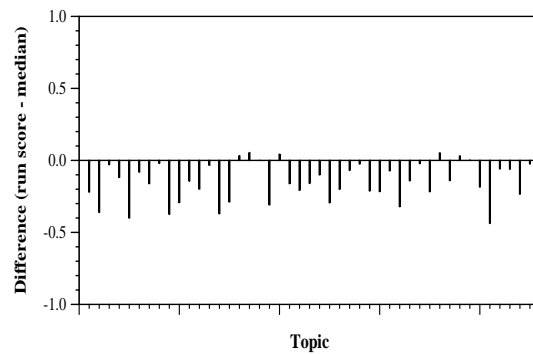
Summary Statistics	
Run ID	Marouane_QQ_EnM-BTN
Topic type	feedback
Contributed to judgment sets?	yes

Overall measures	
Number of topics	45
Total number retrieved	44995
Total relevant	5824
Total relevant retrieved	1710
MAP	0.1199
Mean Bpref	0.2379
Mean NDCG@20	0.4778
Mean RBP(p=0.5)	0.6209 +0.0010

Document Level Averages	
	Precision
At 5 docs	0.7067
At 10 docs	0.6289
At 15 docs	0.5526
At 20 docs	0.4978
At 30 docs	0.4267
R-Precision	
Exact	0.1819



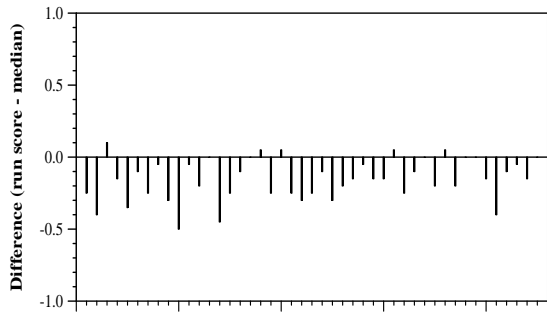
Per-topic difference from median bpref for all Round 4 runs



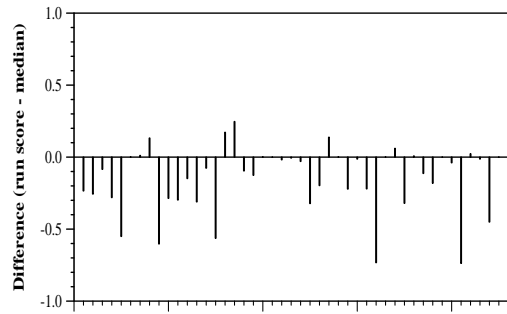
Per-topic difference from median NDCG@20 for all Round 4 runs

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Per-topic difference from median P@20 for all Round 4 runs



Per-topic difference from median RBP(p=0.5) for all Round 4 runs