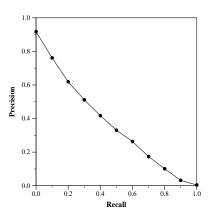
Run Description

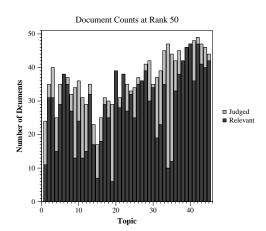
This run is produced by Reciprocal Rank Fusion (Cormack et al., 2009) of (a) Terrier & Anserini retrieval runs and neural retrieval runs based on synthetic query generation (https://arxiv.org/abs/2004.14503) with various combinations of query, question and narrative (b) TF-Ranking + ELECTRA with softmax loss (https://arxiv.org/abs/2004.08476) trained on MS-Marco dataset. This is a fully automatic run, with no extra-tuning based on the existing judgments from TREC-COVID.

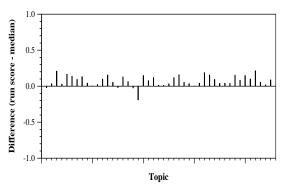
Summary Statistics	
Run ID	UPrrf38rrf2-r4
Topic type	automatic
Contributed to judgment sets?	no

Overall measures		
Number of topics	45	
Total number retrieved	44982	
Total relevant	5824	
Total relevant retrieved	4334	
MAP	0.3612	
Mean Bpref	0.5917	
Mean NDCG@20	0.6792	
Mean RBP(p=0.5)	0.7602 + 0.0067	

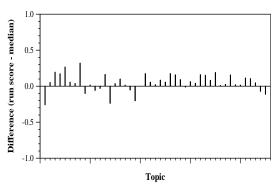
Decument Level Aveneges		
Document Level Averages Precision		
At 5 docs	0.8133	
At 10 docs	0.7844	
At 15 docs	0.7437	
At 20 docs	0.7156	
At 30 docs	0.6541	
R-Precision		
Exact	0.3959	





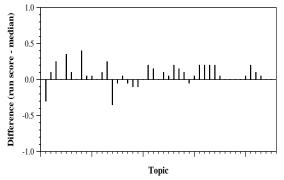




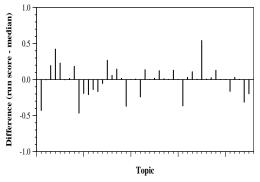


Per-topic difference from median NDCG@20 for all Round 4 runs

Round 4 results — Run UPrrf38rrf2-r4 submitted from unique_ptr



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