Round 1 results — Run yn-r1-concepttext submitted from NI_CCHMC

Run Description

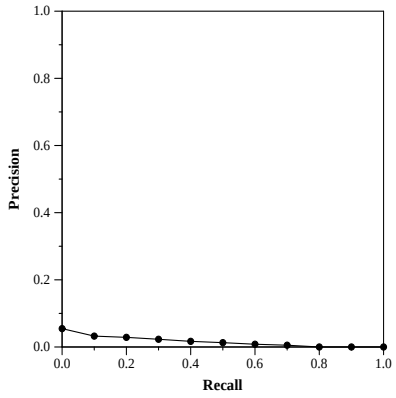
In our earlier research we assembled state-of-the-art natural language processing (NLP), information retrieval, and machine learning technologies and developed an automated clinical trial eligibility screener. The system identifies and transforms relevant words or phrases (e.g., diseases, medications, procedures) in an article to medical terms using clinical terminologies including UMLS, SNOMED-CT, RxNorm and CPT codes. Assertion detection is then applied to convert the terms to the corresponding format. Finally, the system matches query terms manually derived from a topic with the extracted medical terms to identify relevant articles for the topic. Reference: Ni Y, Kennebeck S, Dexheimer JW, et al. Automated clinical trial eligibility prescreening: increasing the efficiency of patient identification for clinical trials in the emergency department. J Am Med Inform Assoc. 2014; 21(5):776-784.

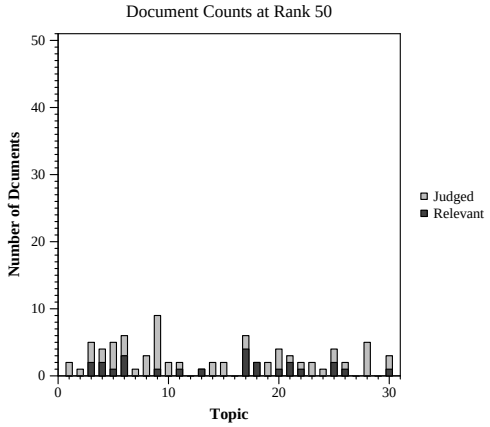
Summary Statistics	
Run ID	yn-r1-concepttext
Topic type	manual
Contributed to judgment sets?	no

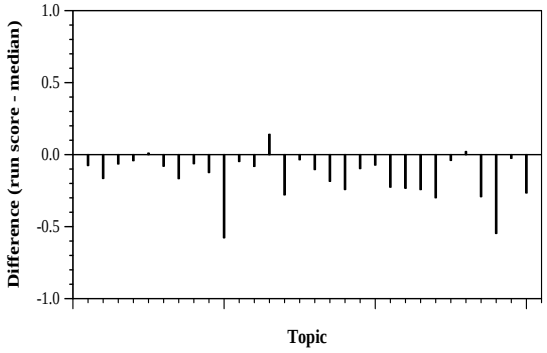
Overall measures	
Number of topics	30
Total number retrieved	30000
Total relevant	2352
Total relevant retrieved	890
MAP	0.0101
Mean Bpref	0.1755
Mean NDCG@10	0.0099

Document Level Averages	
	Precision
At 5 docs	0.0067
At 10 docs	0.0167
At 15 docs	0.0156
At 20 docs	0.0150
At 30 docs	0.0167

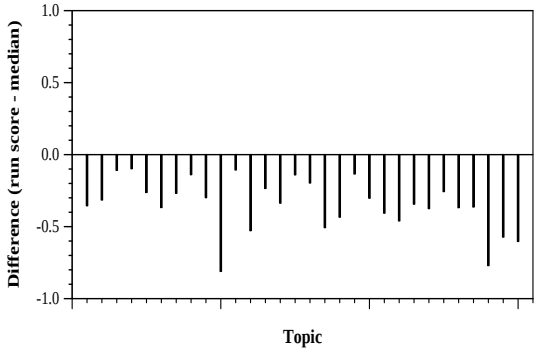
R-Precision	
Exact	0.0163







Per-topic difference from median bpref for all Round 1 runs



Per-topic difference from median NDCG@10 for all Round 1 runs

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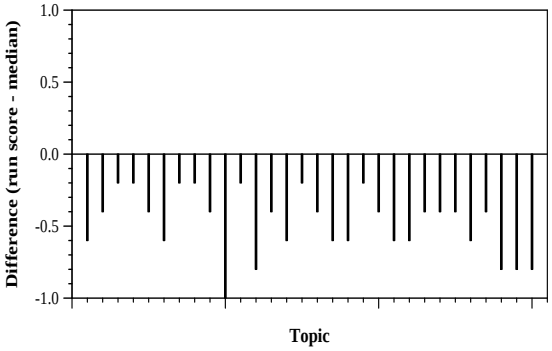

Per-topic difference from median P@5 for all Round 1 runs