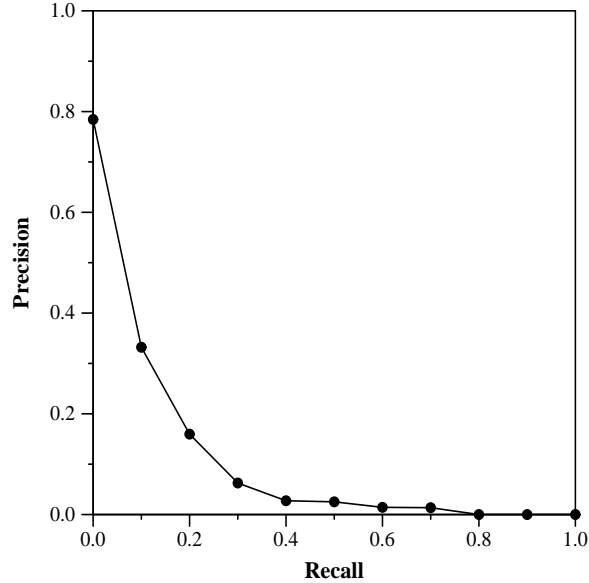
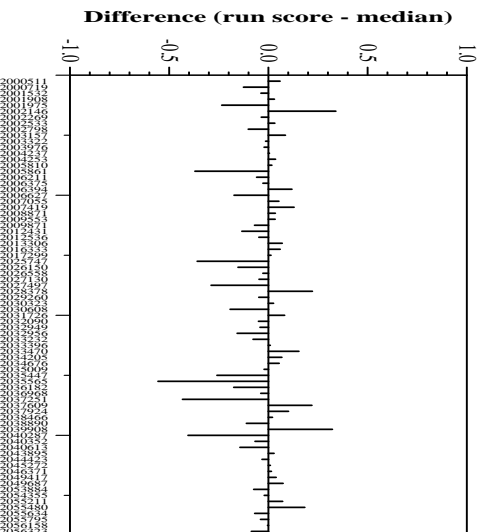


Run Description	
Run ID:	fused_3runs
Task:	Passage Ranking
Subtask:	Reranking the official top 100
Topic type:	Automatic
Single-stage retrieval?	No
Dense retrieval?	Yes
Baseline run?	No
Used deep nn model?	Pre-trained model
Type of training:	This year's MS MARCO training data; Previous year's MS MARCO training data
Training cost:	Only pre-trained models were used
Pre-processing/indexing cost:	No specific process was used
Query processing cost:	All the reranking process (3 models: ms-marco-MiniLM with SBERT, T5 and BERT) was done at the runtime. No GPU was needed during reranking.

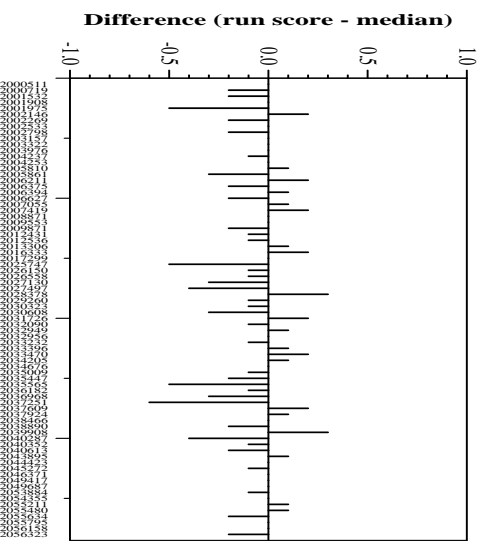
Overall measures	
Number of topics	76
Total number retrieved	6663
Total relevant	4613
Total relevant retrieved	520
MAP	0.0962
Mean NDCG@10	0.4988
Mean Reciprocal Rank	0.7509

Document Level Averages	
	Precision
At 5 docs	0.4921
At 10 docs	0.3697
At 15 docs	0.2947
At 20 docs	0.2487
At 30 docs	0.1882
R-Precision	
Exact	0.1351

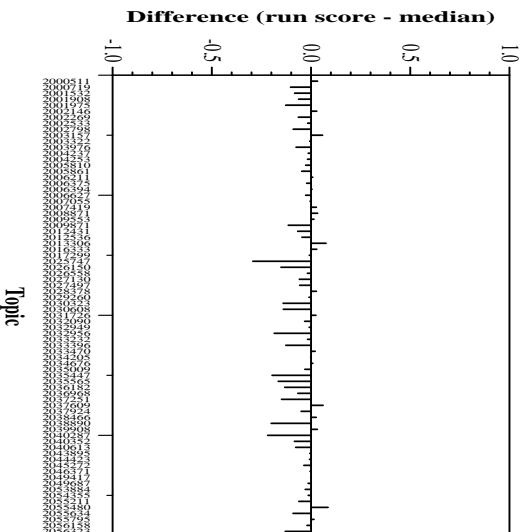




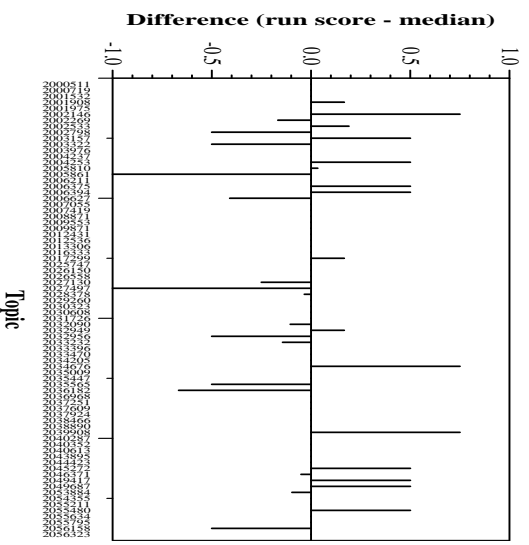
Per-topic difference from median for NDCG@10 for Passage Ranking runs



Per-topic difference from median for Prec@10 for Passage Ranking runs



Per-topic difference from median for Average Precision for Passage Ranking runs



Per-topic difference from median for Reciprocal Rank for Passage Ranking runs