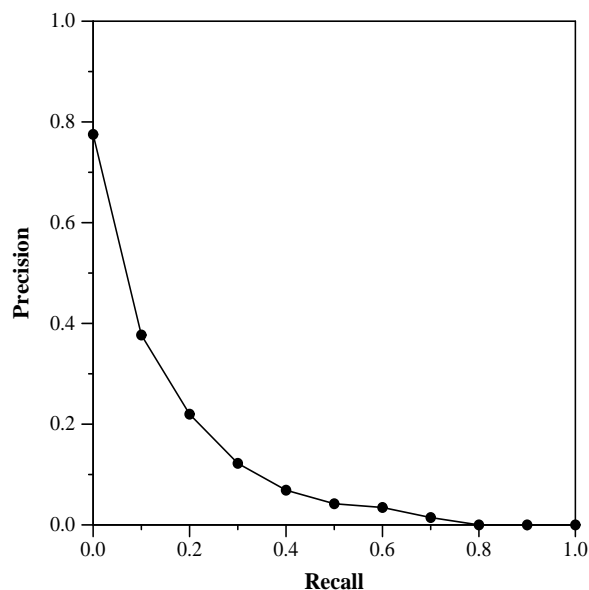
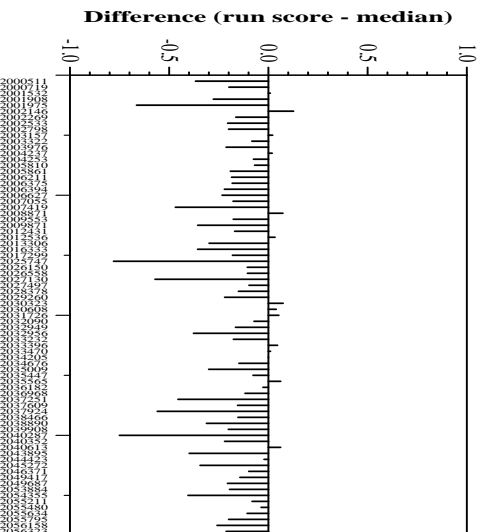


Deep Learning Track results — (CERTH_ITI_M4D) Information Technologies Institute CERTH

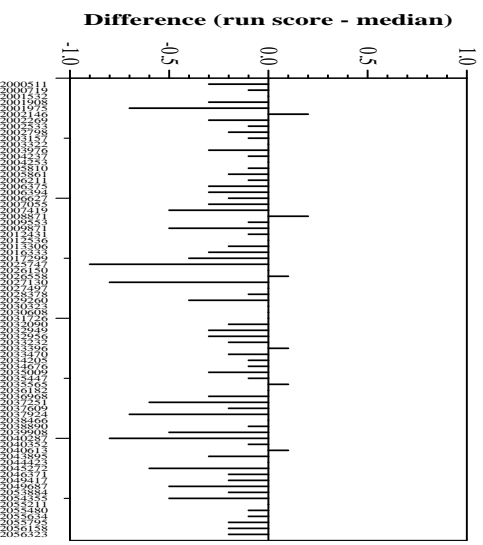
Run Description	
Run ID:	rm3_term_filter_rerank
Task:	Document Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	No
Dense retrieval?	Yes
Baseline run?	No
Used deep nn model?	Pre-trained model
Type of training:	Previous year's MS MARCO training data
Training cost:	GPU: GeForce RTX 2080 Ti GPU memory: 11GB CPU: Intel(R) Xeon(R) Silver 4108 CPU @ 1.80GHz RAM: 126GB Storage: HDD Term filtering model training: 40mins
Pre-processing/indexing cost:	GPU: 1x GeForce RTX 2080 Ti GPU memory: 11GB CPU: Intel(R) Xeon(R) Silver 4108 CPU @ 1.80GHz RAM: 126GB Storage: HDD Indexing duration: 5 hours No vectorization during indexing
Query processing cost:	GPU: 1x GeForce RTX 2080 Ti GPU memory: 11GB CPU: Intel(R) Xeon(R) Silver 4108 CPU @ 1.80GHz RAM: 126GB Storage: HDD The whole pipeline: 6.5/query

Overall measures		Document Level Averages	
Number of topics	76		Precision
Total number retrieved	7600	At 5 docs	0.5447
Total relevant	9152	At 10 docs	0.4763
Total relevant retrieved	1474	At 15 docs	0.4246
MAP	0.1168	At 20 docs	0.3921
Mean NDCG@10	0.3609	At 30 docs	0.3425
Mean Reciprocal Rank	0.7601	R-Precision	
		Exact	0.1746

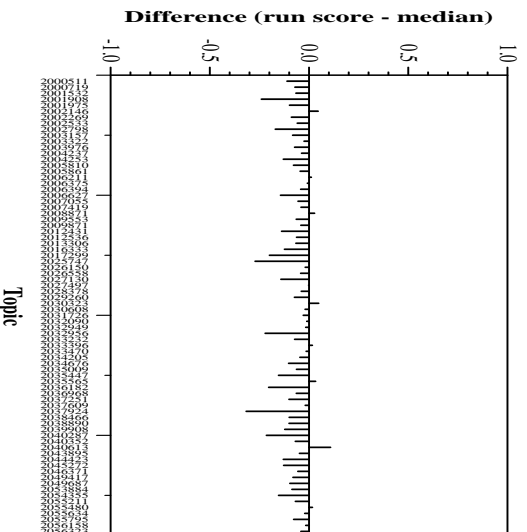




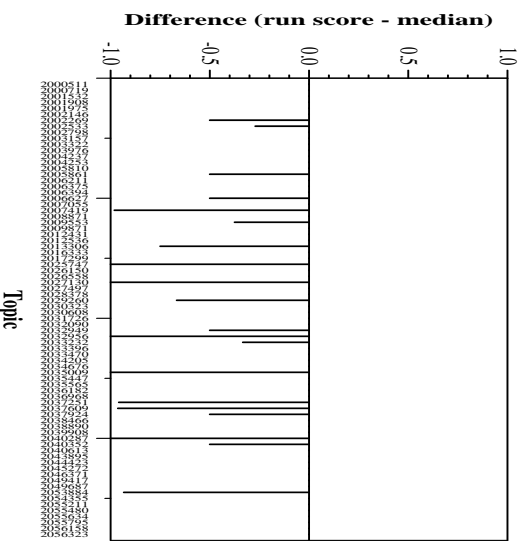
Per-topic difference from median for NDCG@10 for Document Ranking runs



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



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



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