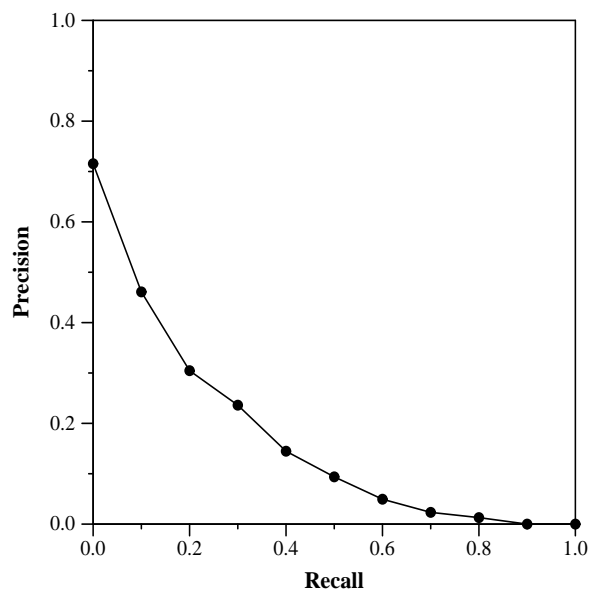


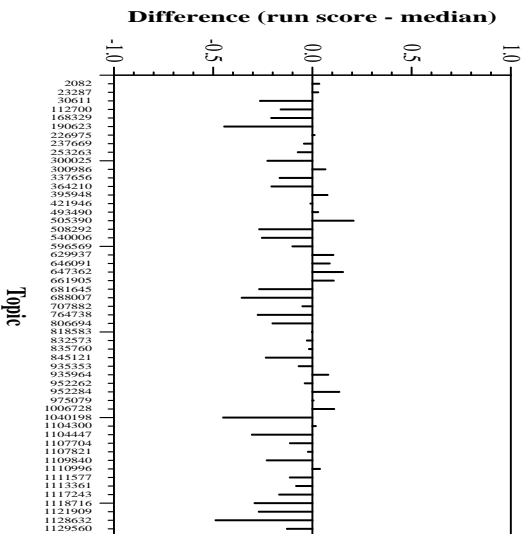
Deep Learning Track results — (TU_Vienna) TU Wien

Run Description	
Run ID:	TUW_DR_Base
Task:	Passage Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	Yes
Dense retrieval?	Yes
Used deep nn model?	Pre-trained model
Type of training:	Previous year's MS MARCO training data
Pre-processing/indexing cost:	Encoding: 400 GPU-minutes on a single TITAN RTX GPU (Using a single newer generation A40 GPU we observe 320 GPU-Minutes); Indexing for a full index is only loading vectors from disk: 3 CPU-minutes
Query processing cost:	Brute force on the CPU for single query: 42 CPU-seconds (on a single core)

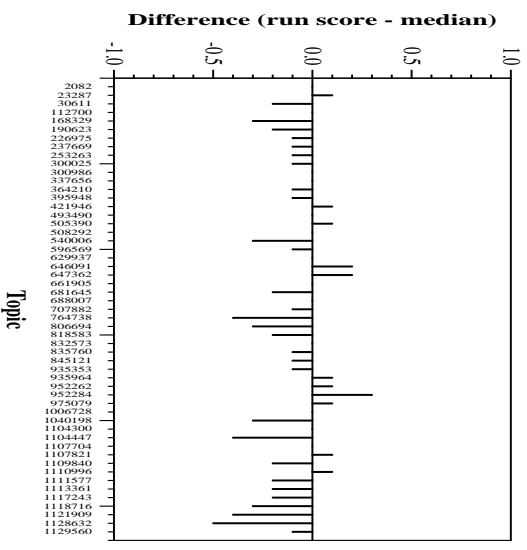
Overall measures	
Number of topics	53
Total number retrieved	5300
Total relevant	3427
Total relevant retrieved	928
MAP	0.1540
Mean NDCG@10	0.4991
Mean Reciprocal Rank	0.6768

Document Level Averages	
Precision	
At 5 docs	0.4528
At 10 docs	0.4208
At 15 docs	0.3761
At 20 docs	0.3425
At 30 docs	0.3031
R-Precision	
Exact	0.2315

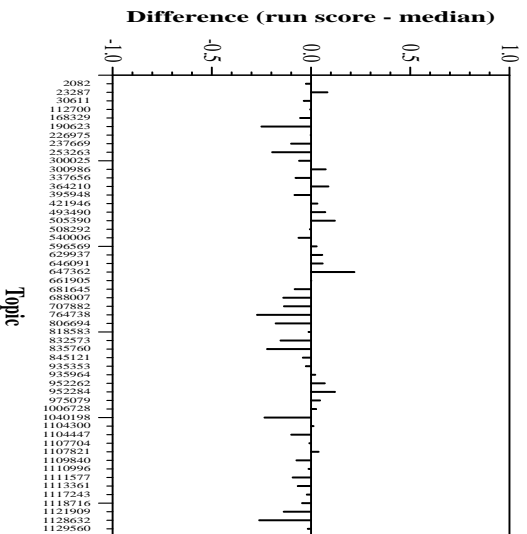




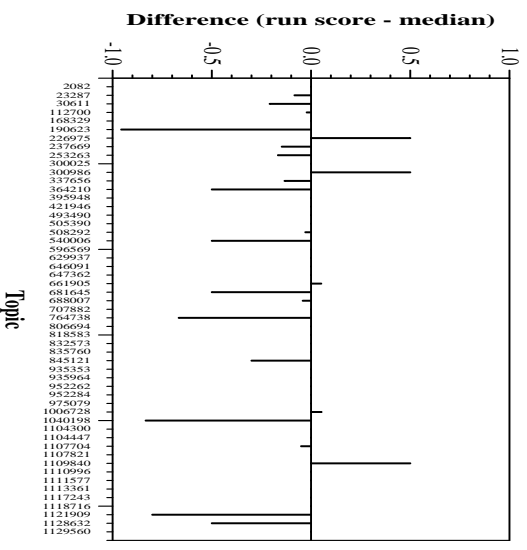
Per-topic difference from median for NDCG@10 for Passage Ranking runs



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



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



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