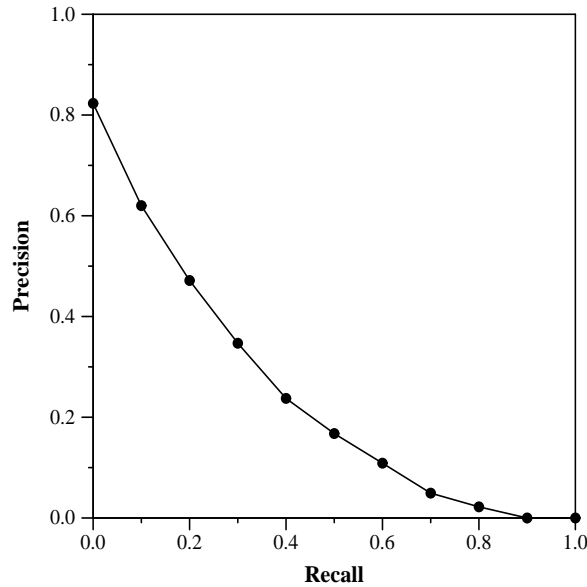
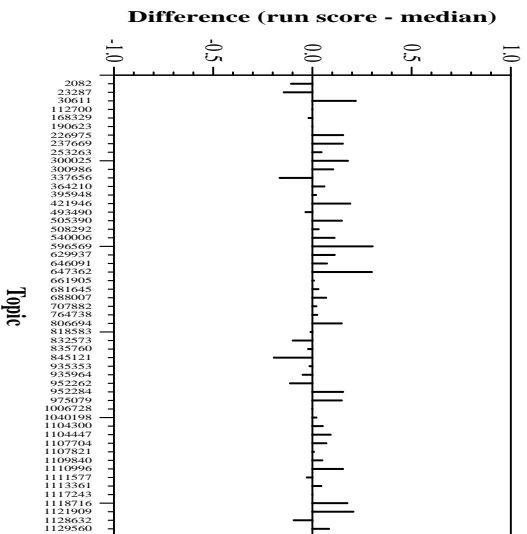


Deep Learning Track results — (bcai) Bosch Center for AI

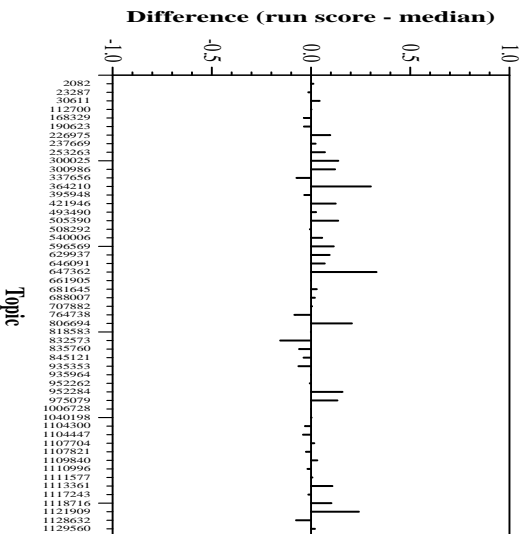
Run Description	
Run ID:	bcai_p_vbert
Task:	Passage Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	No
Dense retrieval?	Yes
Used deep nn model?	Pre-trained model
Type of training:	This year's MS MARCO training data; Previous year's MS MARCO training data
Pre-processing/indexing cost:	1. Training bl_bcai_p_nn_rt 2. Indexing document texts using Lucene. 3. Creation of forward indices for passages and documents.
Query processing cost:	1. Retrieval: see the cost of bl_bcai_p_nn_rt 2. Re-ranking took 10 seconds for 300 passages on a single RTX 3090.

Overall measures		Document Level Averages	
Number of topics	53		Precision
Total number retrieved	5300	At 5 docs	0.6453
Total relevant	3427	At 10 docs	0.5811
Total relevant retrieved	1071	At 15 docs	0.5119
MAP	0.2323	At 20 docs	0.4519
Mean NDCG@10	0.6502	At 30 docs	0.3830
Mean Reciprocal Rank	0.7957	R-Precision	
		Exact	0.2973

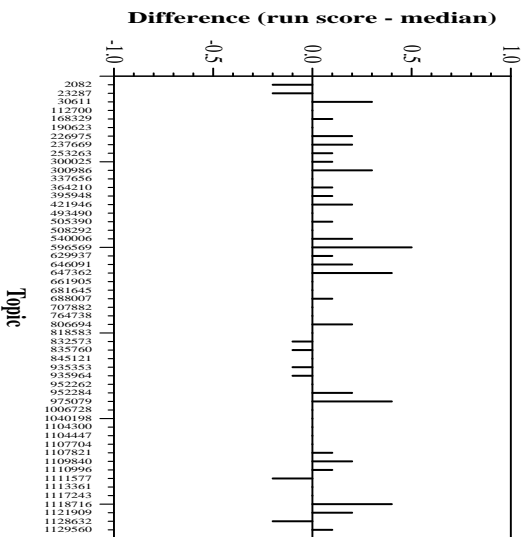




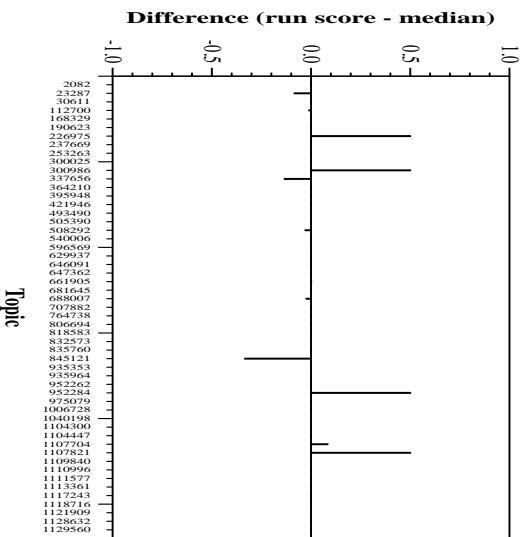
Per-topic difference from median for NDCG@10 for Passage Ranking runs



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



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



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