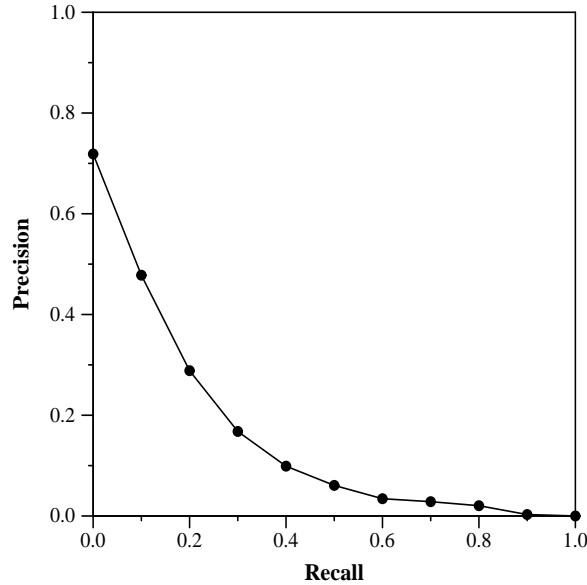


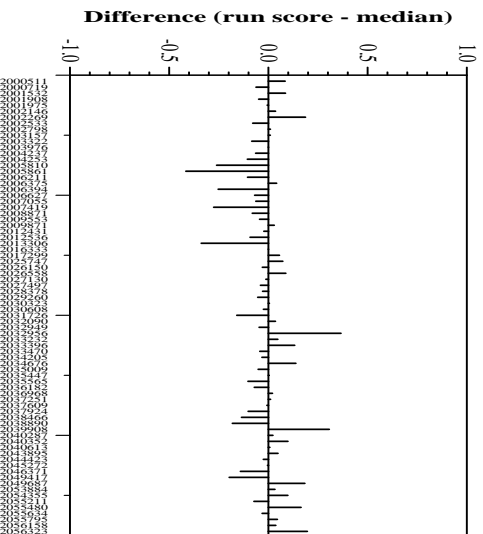
Deep Learning Track results — (h2oloo) University of Waterloo

Run Description	
Run ID:	p_agg
Task:	Passage Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	Yes
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:	Training and hard negative mining require around 1 days in a single V100 GPU.
Pre-processing/indexing cost:	Index requires 3 hours with 8 A6000 GPUs.
Query processing cost:	We use Faiss brute-force search.

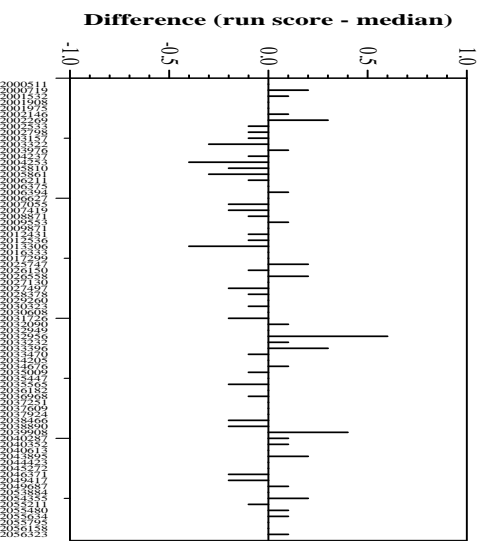
Overall measures	
Number of topics	76
Total number retrieved	6628
Total relevant	4613
Total relevant retrieved	1069
MAP	0.1455
Mean NDCG@10	0.5152
Mean Reciprocal Rank	0.6572

Document Level Averages	
	Precision
At 5 docs	0.4921
At 10 docs	0.4211
At 15 docs	0.3675
At 20 docs	0.3250
At 30 docs	0.2689
R-Precision	
Exact	0.2202

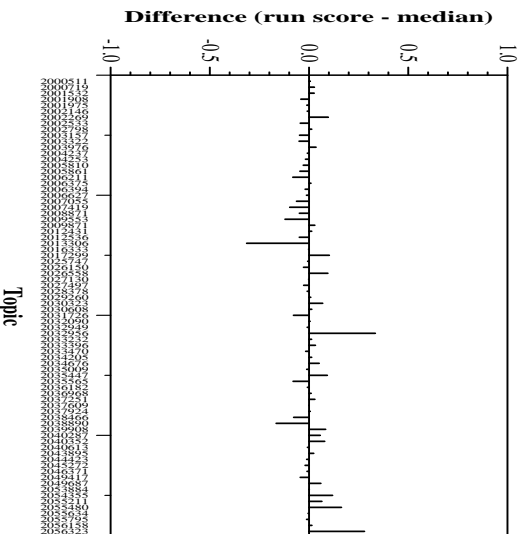




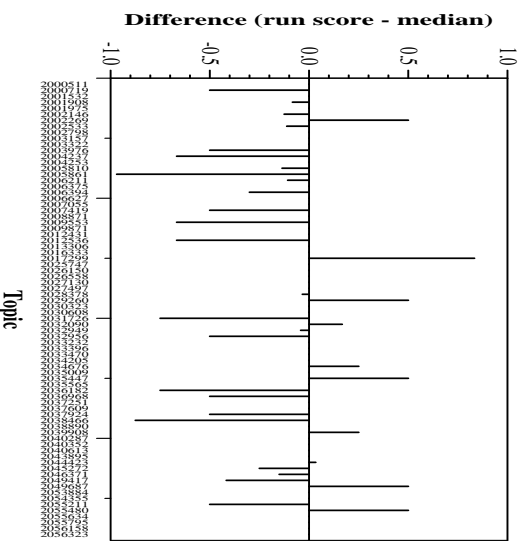
Per-topic difference from median for NDCG@10 for Passage Ranking runs



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