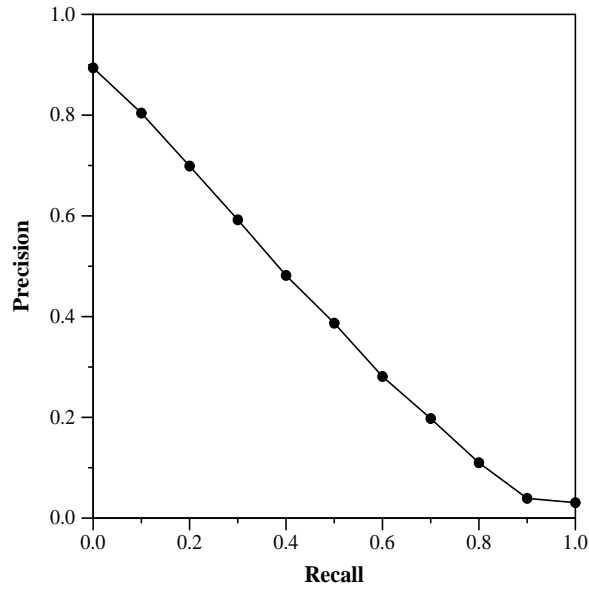
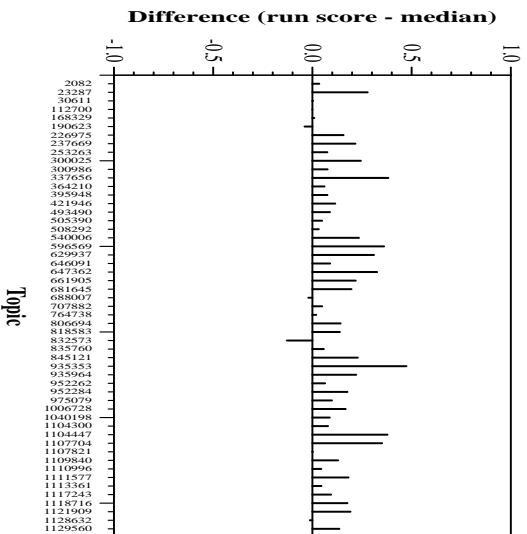


Deep Learning Track results — (NLE) Naver Labs Europe

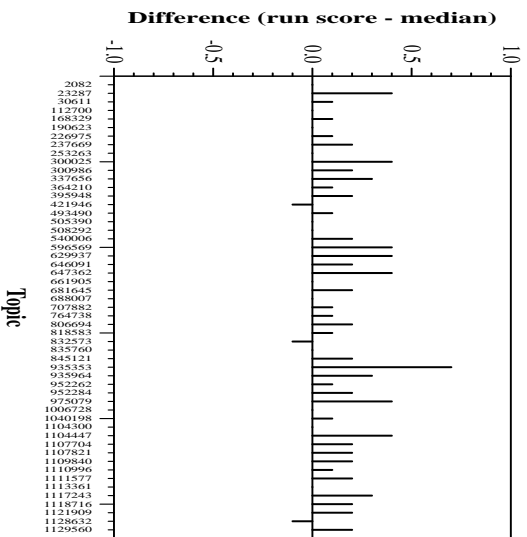
Run Description	
Run ID:	NLE_P_v1
Task:	Passage Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	No
Dense retrieval?	No
Used deep nn model?	Pre-trained model
Type of training:	Previous year's MS MARCO training data
Pre-processing/indexing cost:	1 day on 4V100 for indexing. Index takes ~100 GB after finished. Index is then used only on CPU
Query processing cost:	Approximative values: First stage ranker takes 1 sec per query on 24 cpus. 5 of the 7 rerankers take 2 sec per query on 4 V100. 2 of the 7 rerankers take 200 ms per query on 4 V100. So in total it takes 11.4sec per query on 24 cpus + 4V100

Overall measures		Document Level Averages	
Number of topics	53		Precision
Total number retrieved	5300	At 5 docs	0.7208
Total relevant	3427	At 10 docs	0.6642
Total relevant retrieved	1663	At 15 docs	0.6138
MAP	0.3923	At 20 docs	0.5736
Mean NDCG@10	0.7347	At 30 docs	0.5208
Mean Reciprocal Rank	0.8697		
		R-Precision	
		Exact	0.4293

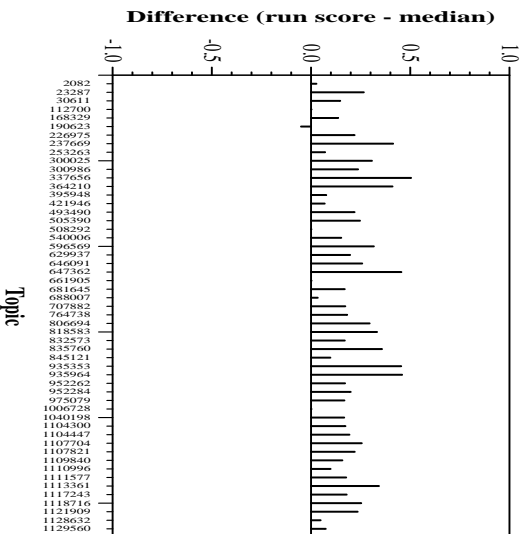




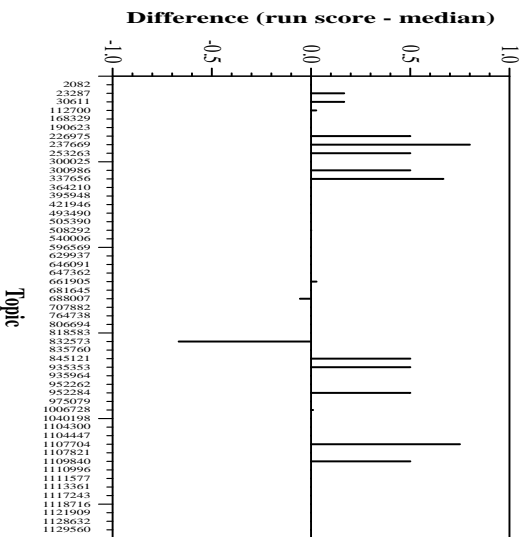
Per-topic difference from median for NDCG@10 for Passage Ranking runs



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



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



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