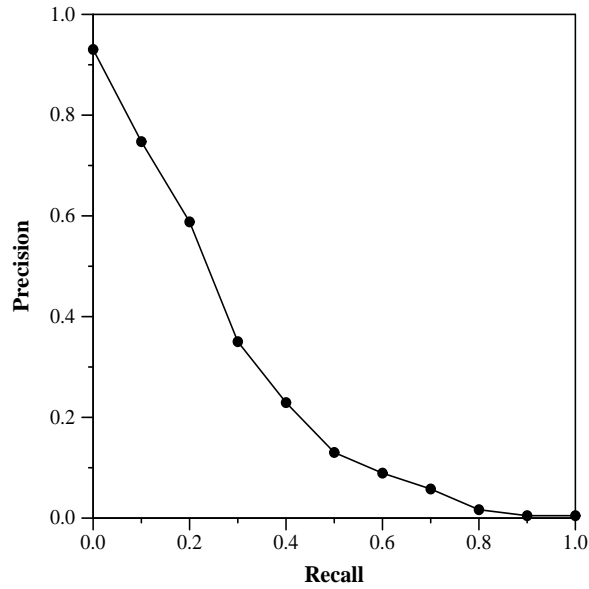
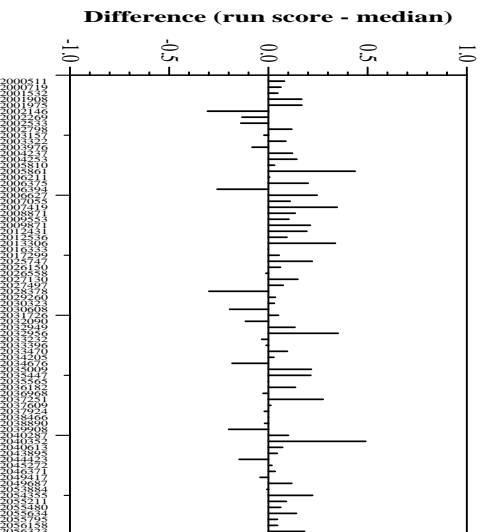


Deep Learning Track results — (NLE) Naver Labs Europe

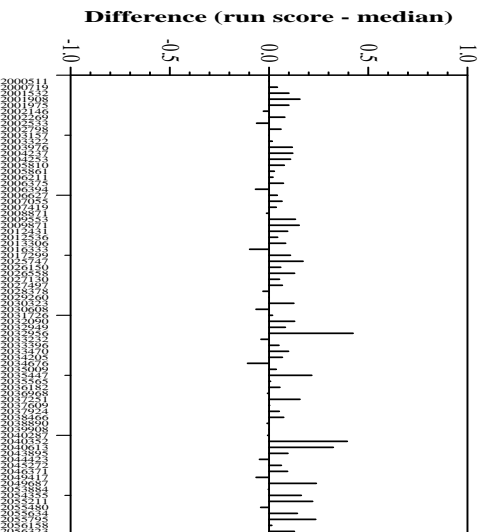
Run Description	
Run ID:	SPLADE_EFF_V_D
Task:	Document Ranking
Subtask:	Full ranking from the collection
Topic type:	Automatic
Single-stage retrieval?	No
Dense retrieval?	No
Baseline run?	Yes
Used deep nn model?	Pre-trained model
Type of training:	Previous year's MS MARCO training data
Training cost:	Unfortunately we did not track the training cost, but if I remember correctly is one day on 4 V100
Pre-processing/indexing cost:	25 GPU hours on V100 (divided into 25 mono gpu jobs)
Query processing cost:	Around 25 seconds with 64 cpu-cores and the PISA software (2 minutes for each model). No gpu used

Overall measures		Document Level Averages	
Number of topics	76		Precision
Total number retrieved	7600	At 5 docs	0.8079
Total relevant	9152	At 10 docs	0.7382
Total relevant retrieved	2761	At 15 docs	0.6842
MAP	0.2610	At 20 docs	0.6480
Mean NDCG@10	0.6117	At 30 docs	0.5930
Mean Reciprocal Rank	0.9039		R-Precision
		Exact	0.3171

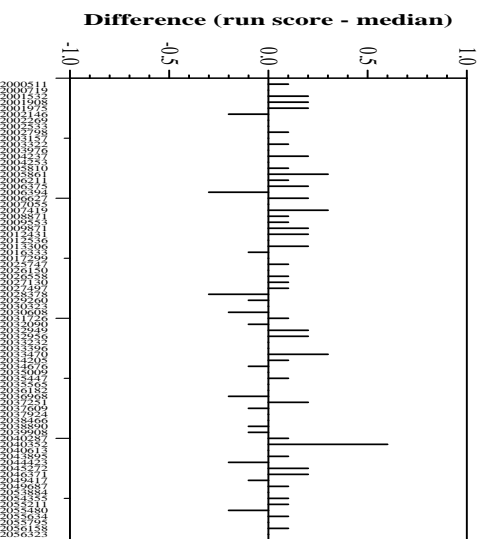




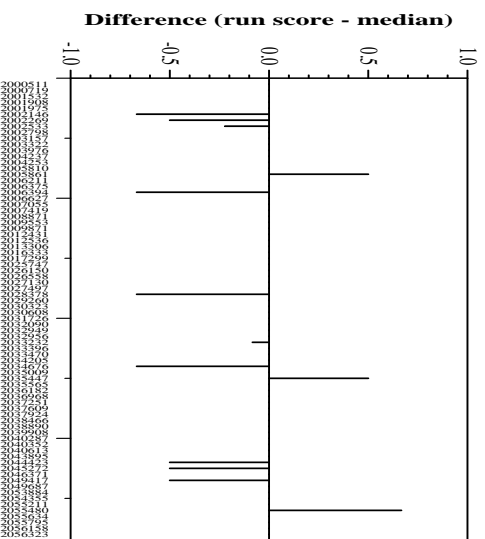
Per-topic difference from median for NDCG@10 for Document Ranking runs



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



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



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