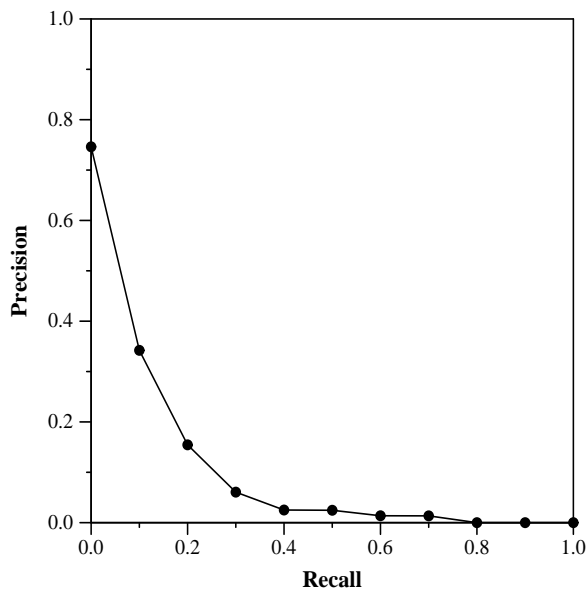
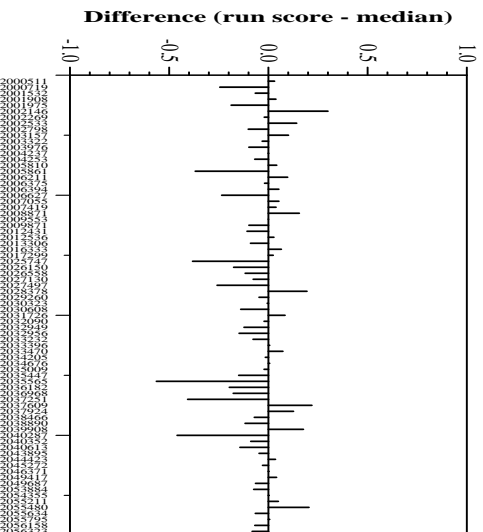


| Run Description | |
|-------------------------------|---|
| Run ID: | cip_r2 |
| Task: | Passage Ranking |
| Subtask: | Reranking the official top 100 |
| Topic type: | Automatic |
| Single-stage retrieval? | No |
| Dense retrieval? | No |
| Baseline run? | No |
| Used deep nn model? | Pre-trained model |
| Type of training: | Previous year's MS MARCO training data |
| Training cost: | Cost 1272 minutes for training in MS MARCO v1 on six NVIDIA TITAN RTX (24G) GPU. The total GPU minutes is 7632 minutes. |
| Pre-processing/indexing cost: | Cost 94 minutes for train dataset passage processing and indexing on six NVIDIA TITAN RTX (24G) GPUs. The total GPU minutes is 564 minutes. |
| Query processing cost: | Cost 1 minutes and 47 seconds on six NVIDIA TITAN RTX (24G) GPUs. The total GPU minutes is 11 minutes. |

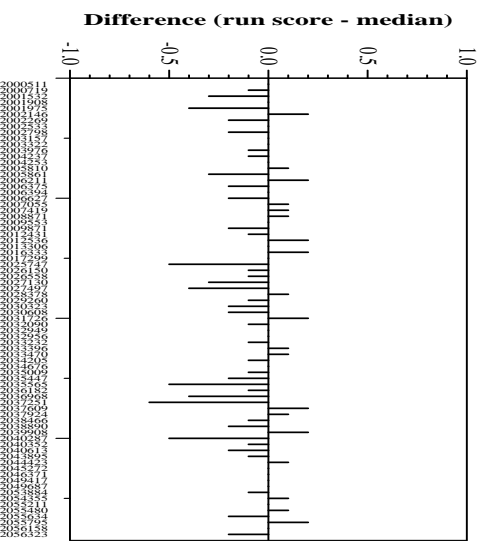
| Overall measures | |
|--------------------------|--------|
| Number of topics | 76 |
| Total number retrieved | 6663 |
| Total relevant | 4613 |
| Total relevant retrieved | 520 |
| MAP | 0.0930 |
| Mean NDCG@10 | 0.4839 |
| Mean Reciprocal Rank | 0.7140 |

| Document Level Averages | |
|-------------------------|--------|
| Precision | |
| At 5 docs | 0.4711 |
| At 10 docs | 0.3605 |
| At 15 docs | 0.2868 |
| At 20 docs | 0.2414 |
| At 30 docs | 0.1886 |
| R-Precision | |
| Exact | 0.1357 |

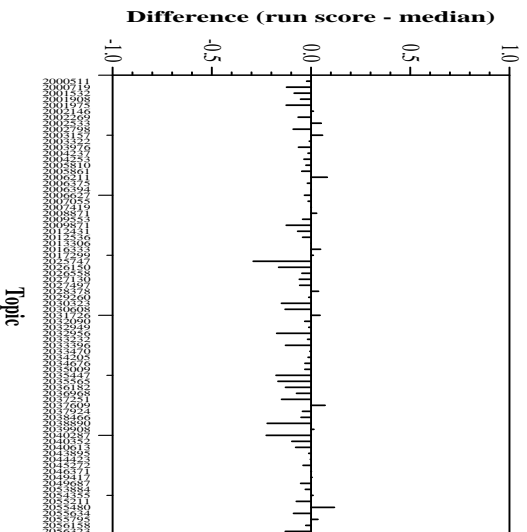




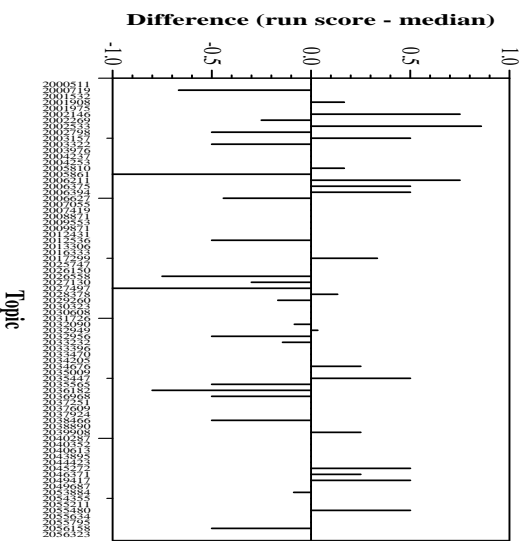
Per-topic difference from median for NDCG@10 for Passage Ranking runs



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