## Run Description

A weighted reciprocal rank fusion of (a) Anserini \& Terrier runs based on different indexing schemes and topic variants, including relevance feedback (b) Neural retrieval runs based on synthetic query generation (https://arxiv.org/abs/2004.14503) (c) TF-Ranking + multiple BERT variants with softmax loss (https://arxiv.org/abs/2004.08476) trained on MS-Marco (d) TF-Ranking + multiple BERT variants using the question topic field, fine-tuned with softmax loss on the relevance judgments from Rounds 1-4. For weighting the runs, we use a simple scheme which doubles the weight of any runs that have access to relevance judgments in the reciprocal rank fusion.

| Summary Statistics |  |
| :--- | ---: |
| Run ID | UPrrf93-wt-r5 |
| Topic type | feedback |
| Contributed to judgment sets? | yes |


| Overall measures |  |
| :--- | ---: |
| Number of topics | 50 |
| Total number retrieved | 49887 |
| Total relevant | 10910 |
| Total relevant retrieved | 8085 |
| MAP | 0.4718 |
| Mean Bpref | 0.6372 |
| Mean NDCG@20 | 0.8496 |
| Mean RBP $(\mathrm{p}=0.5)$ | $0.9197+0.0004$ |


| Document Level Averages |  |
| :--- | ---: |
|  | Precision |
| At 5 docs | 0.9720 |
| At 10 docs | 0.9460 |
| At 15 docs | 0.9040 |
| At 20 docs | 0.8760 |
| At 30 docs | 0.8220 |
| R-Precision |  |
| Exact |  |





Per-topic difference from median bpref for all Round 4 runs


Per-topic difference from median NDCG@20 for all Round 4 runs

Round 5 results - Run UPrrf93-wt-r5 submitted from unique_ptr


Per-topic difference from median P@20 for all Round 4 runs


