## Run Description

The initial results are retrieved with SLEDGE on the whole collections on history, with BM25 and query over fulltext, re-ranking using SciBERT on title and abstract with the question. Then the results are reranked with an inverse-time-decay mechanism and a time score is used as an additional term for reranking. The time score of documents published before 2010 is assigned as 0 and the subsequent published documents is assigned with a scaled score. The weight between the score from SLEDGE and time term is tuned for better performance based on the evaluation from round 1.

| Summary Statistics |  |
| :--- | ---: |
| Run ID | Emory_IRLab_Run1 |
| Topic type | automatic |
| Contributed to judgment sets? | yes |


| Overall measures |  |
| :--- | ---: |
| Number of topics | 35 |
| Total number retrieved | 15080 |
| Total relevant | 3002 |
| Total relevant retrieved | 1240 |
| MAP | 0.2247 |
| Mean Bpref | 0.3539 |
| Mean NDCG@10 | 0.5832 |
| Mean RBP $(\mathrm{p}=0.5)$ | $0.6338+0.0020$ |


| Document Level Averages |  |
| :--- | :---: |
|  | Precision |
| At 5 docs | 0.6971 |
| At 10 docs | 0.6286 |
| At 15 docs | 0.5657 |
| At 20 docs | 0.5129 |
| At 30 docs | 0.4429 |
| R-Precision |  |
| Exact |  |





Per-topic difference from median bpref for all Round 2 runs


Per-topic difference from median NDCG@ 10 for all Round 2 runs

Round 2 results - Run Emory_IRLab_Run1 submitted from Emory_IRLab


