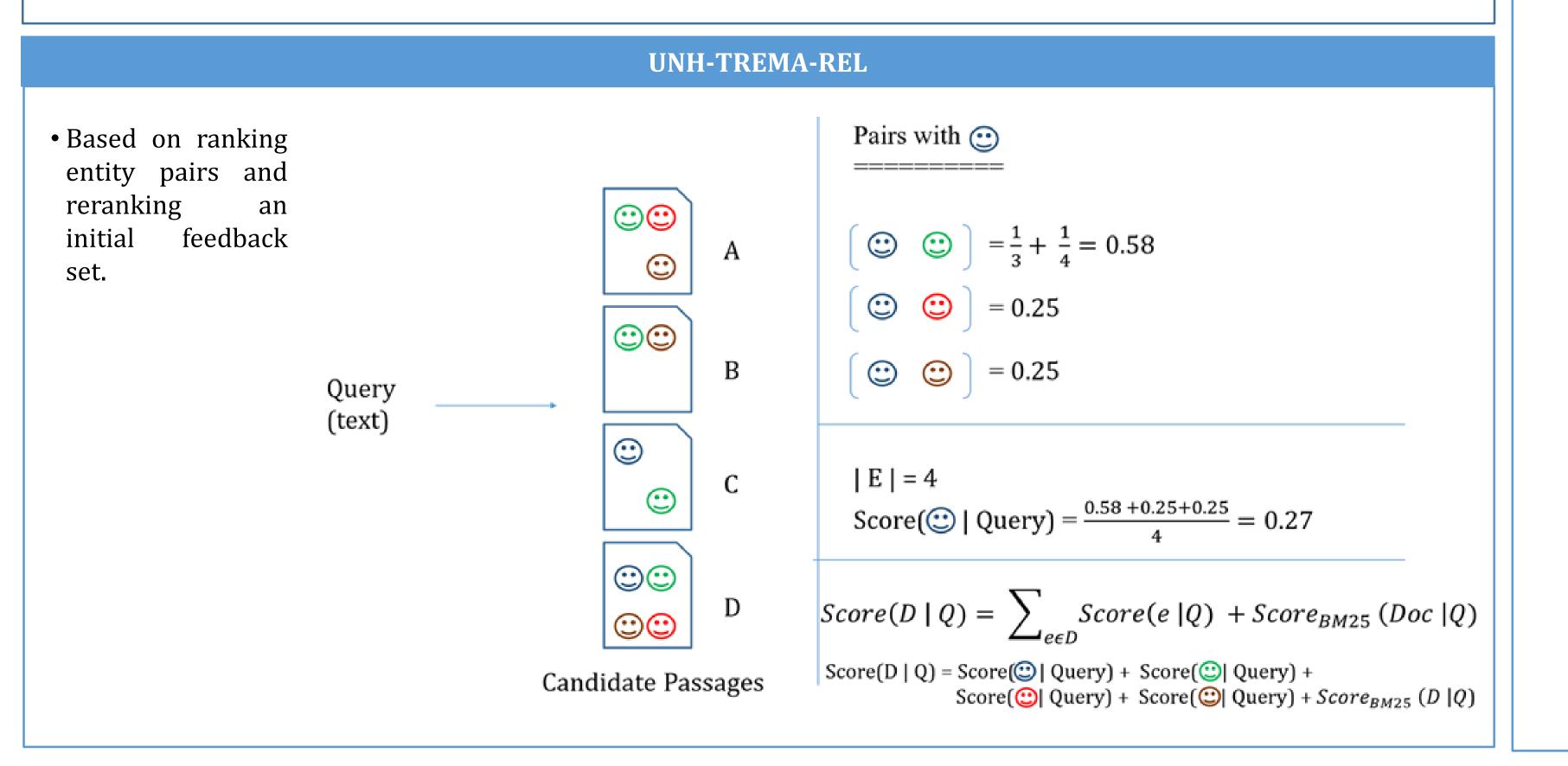


Abstract

We study the performance of methods based on text and entity features on a conversational assistance dataset from TREC CAST. Our methods do not make use of any question answering or dialogue tracking component. We apply methods which make use of entities in context to another entity and entity pairs

UNH-TREMA-ECN • Based on Entity Context $P(\bigcirc | Q, \bigcirc) = 3$ Document and Entity Marginalization. $P(\bigcirc | Q, \bigcirc) = 2$ @ @ • Entities predicted by an entity ranking system. $P(\bigcirc | Q, \bigcirc) = 1$ @ **@** ` \odot Entity Score(A | Q, \odot) = 3 + 2 + 0 = 5 **© ©** Score(B | Q, \odot) = 3 + 0 + 0 = Score(D | Q, \odot) = 3 + 2 + 1 = 6 @ @ Rank Document Score **Candidate Passages Entity Context Document**



TREMA-UNH at TREC CAST 2019

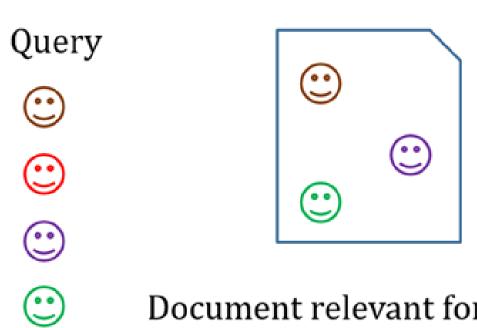
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UNH-TREMA-ECN

• Score of each passage based on how many relevant entities are in the passage.



Score(Document | Query) = 3

Document relevant for the Query

Results

- Since our methods only retrieved from the TREC CAR corpus, Table 1 shows the results on TREC CAR subset.
- Table 2 shows official CAST results.

Table 1: Results obtained on CAR subset

	MAP	P@R	MRR
UNH-TREMA-REL	0.18	0.23	0.54
UNH-TREMA-ENT	0.17	0.23	0.54
UNH-TREMA-ECN	0.16	0.22	0.51

Table 2: Official TREC CAST Results

	MAP@5	NDCG@5
UNH-TREMA-ENT	0.03	0.24
UNH-TREMA-REL	0.03	0.23
UNH-TREMA-ECN	0.02	0.22
Median	0.04	0.29