

----- REVIEW 1 -----

PAPER: 12

TITLE: Entity-Relationship Queries over Wikipedia

OVERALL RATING: 3 (strong accept)

REVIEWER'S CONFIDENCE: 2 (medium)

This paper study multi-predicate entity relationship query and its ranking problem. The goal of the article is well described and the state of the art is appropriate.

If I understood well, the proximity is simply the number of words included in the entity to be ranked and the query divided by the size of the window that contains all these words. If this is true, I suggest to simplify the explanation.

I think that the idea of rewarding dynamically frequent ordering pattern is great! (if it works).

I have no comments about the mutual exclusion and about the single predicate scoring. The multi-predicate scoring penalize low values for any of the predicates. It seems sensible, but I suggest to apply the F measure which satisfies some formal properties when combining measures that are not satisfied by the multiplication. The $F_p(t)$ computation should be explained more clearly. (I did not understand it)

Regarding the experiment, I did not understand well how the system outputs are evaluated. A correct entity could be expressed in several ways. Is it checked manually?

In general I think that it is very interesting and well grounded work that opens the way to fill the gap between DB-based approaches and traditional IR schemes. The experiments are well prepared taking into account that it is a preliminary study.

----- REVIEW 2 -----

PAPER: 12

TITLE: Entity-Relationship Queries over Wikipedia

OVERALL RATING: 2 (accept)

REVIEWER'S CONFIDENCE: 3 (high)

The paper presents a system for dealing with relatively complex queries involving relations between entities (in fact all the examples correspond to named Entities).

The main contribution is that queries involves several predicates (the number of predicates is not limited but all the examples contain 3 predicates) both selective and relational.

The paper is very well written, motivated and formalized. The examples are well chosen, the related works are well explained. The formalization and nomenclature are good.

A limitation is hat the paper only cover the third step of the process (ranker) and the interested readers need to go to other publications for understanding the system as a whole. I suggest to spend a couple of paragraphs for covering this issue.

In my opinion there are two main problems with the paper.

First, the validation of predicates is based on simple co-occurrence of the terms involved. I think that this is extremely brittle. Systems based on term co-occurrence have very limited success in other NLP tasks (Q&A, RTE, ...). In the section of future work authors say that they plan to use richer NL tools. I think it is absolutely necessary.

Second the comparison with other system is poor and I guess it is not fair.

The experiments are good when comparing the different metrics, parameters, ranking methods, and the like. But when comparing the system with others there are problems:

In the case of ER the conclusion is that CM/BCM outperforms ER specially in the case of multi-predicate queries. But it seems that ER "focuses on single-predicate ...". So what are we comparing.

The case of INEX and INRIA correspond to really different tasks and evaluation framework. So I am not convinced with the comparison with other systems. (in fact authors acknowledge that "this comparison is not strictly fair").

Anyway I think that the paper has enough merits to be accepted.

----- REVIEW 3 -----

PAPER: 12

TITLE: Entity-Relationship Queries over Wikipedia

OVERALL RATING: 2 (accept)

REVIEWER'S CONFIDENCE: 1 (low)

This paper

----- REVIEW 4 -----

PAPER: 12

TITLE: Entity-Relationship Queries over Wikipedia

OVERALL RATING: 2 (accept)

REVIEWER'S CONFIDENCE: 1 (low)

The paper proposes a mechanism for searching entities in Wikipedia. The entity-relationship query consists of a declarative scheme with tuples of entities. They also present a ranking structure to evaluate individual and multiple predicate scores based on Bounded Cumulative Model.

The paper is well-written in general although some parts are confusing. On the other hand, the article seems to be a preliminary work. However, the authors present a good experimental framework and the results are promising.

----- REVIEW 5 -----

PAPER: 12

TITLE: Entity-Relationship Queries over Wikipedia

OVERALL RATING: 2 (accept)

REVIEWER'S CONFIDENCE: 3 (high)

This paper describes an approach for extracting indirect entity-relations. The addressed problem is very interesting and challenging, considering that most of the Wikipedia entries cannot be found using a simple database search. The authors present an approach, which extracts the contexts around the entities of interest, estimates the relevant from non-relevant patterns and finally ranks the extracted entities. The paper is easy to follow and the walk-through examples clarify additionally the mechanism of the measures and the ranking functions. The weakest part of the paper concerns the experimental set up. First, what would be a reasonable baseline and how would your approach compare against it? Second, for the queries shown, one can show (1) how many of the entities can be correctly extracted using a simple database search, (2) how many of the entities can be correctly extracted using separate searches (as explained in the walk-through example of Yahoo! and Stanford alumnae list merging), (3) show precision and the computational time for (1), (2), and finally for your algorithm. Also there is no error analysis and it is a bit difficult to understand why the ranking of the 10 or 50 elements drops down to .4-.5%.