

Building Bridges across Social Platforms:

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Answering Twitter Questions with Yahoo! Answers

Introduction

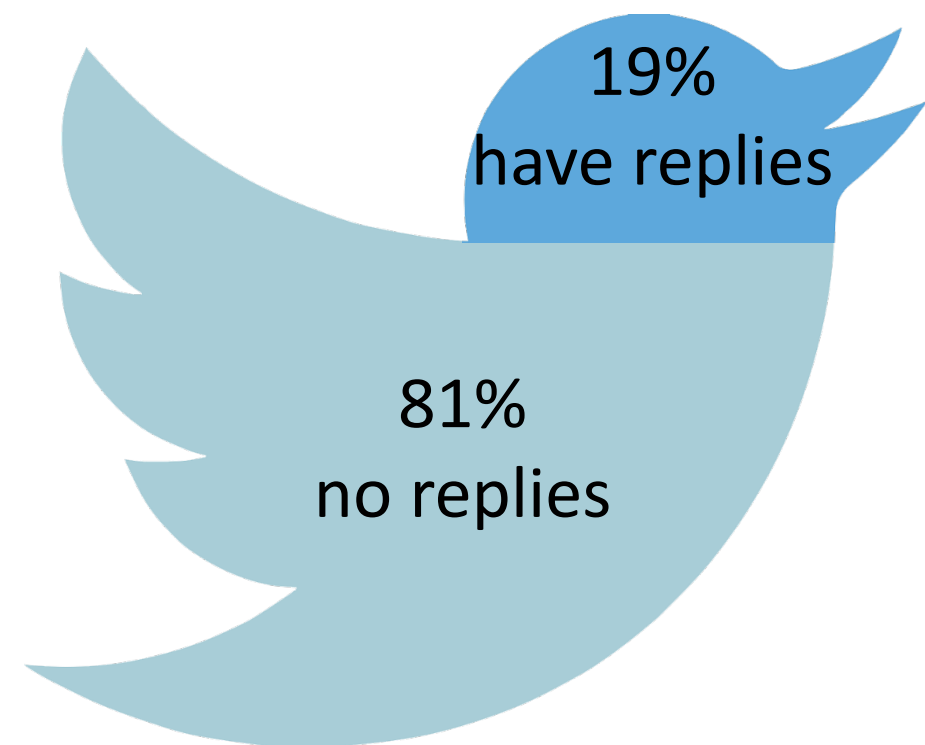
Sponsored by Qatar National Research Fund (NPRP 6-1377-1-257), an IBM Ph.D. Fellowship, and SIGIR Student Travel Grant

Haider Albassam
@Haderdaraide

Any awesome views or places in Chicago I should check out??
I have a week until I start my new work life!



Title I'm going to Chicago in the summer this is my first time going what places should i go check out?
Body for eating or shopping or sightseeing....ECT?
Answer **Best Answer:** Museum of Science and Industry, Navy Pier (attractions and restaurants), Water Tower Place (shopping), Lincoln Park Zoo, Wrigley Field (take in a Cub's ball game), Shedd Aquarium, Adler Planetarium, Sears Tower (spectacular view of the city), Field Museum, Art Institute, Hard Rock Café (food and atmosphere), eat delicious Chicago pizza (Home Run Inn, Gino's, Pizzeria Uno, Giordano's), Oak Street Beach (sunbathing and people watching).

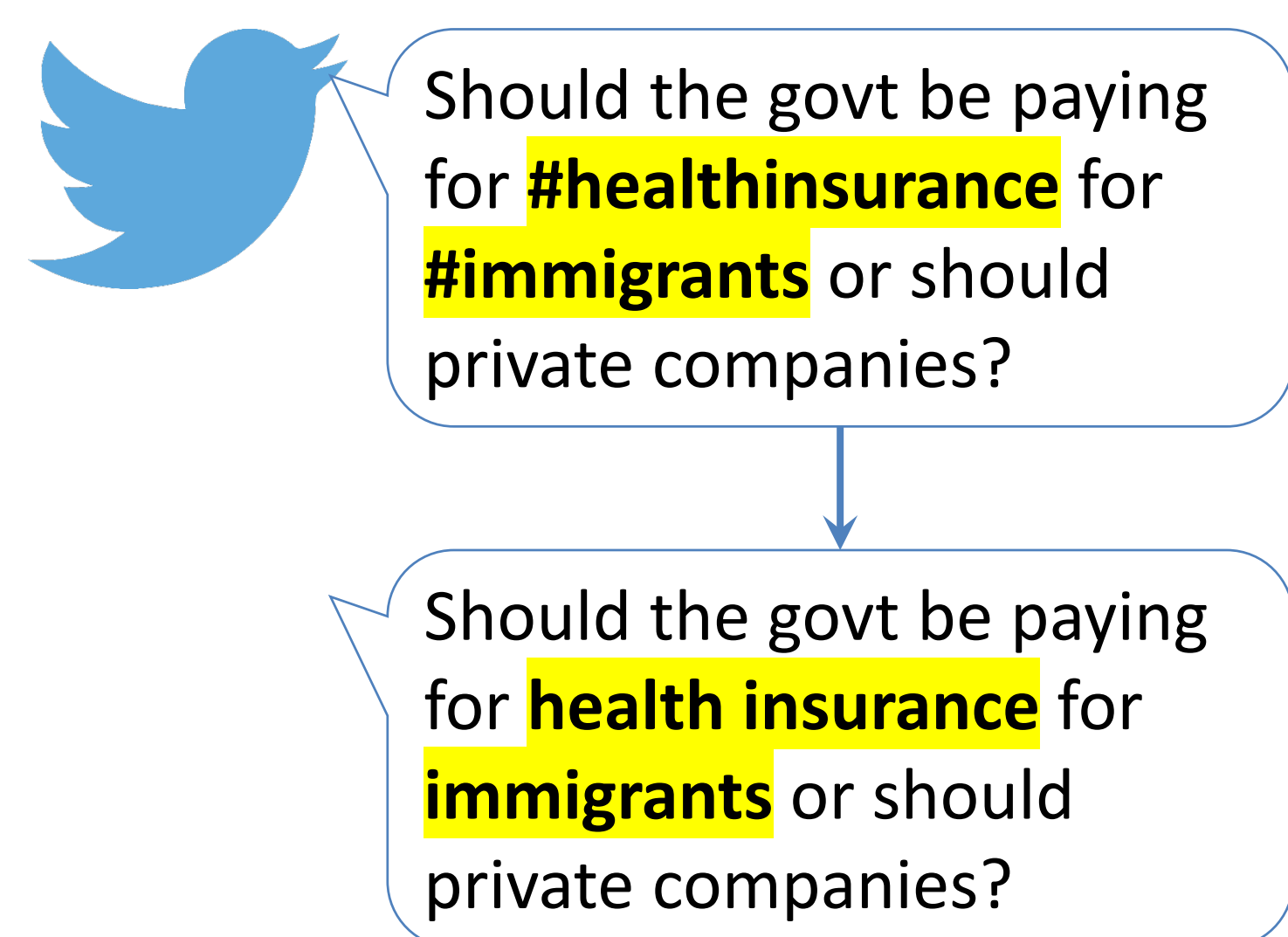


Experiments

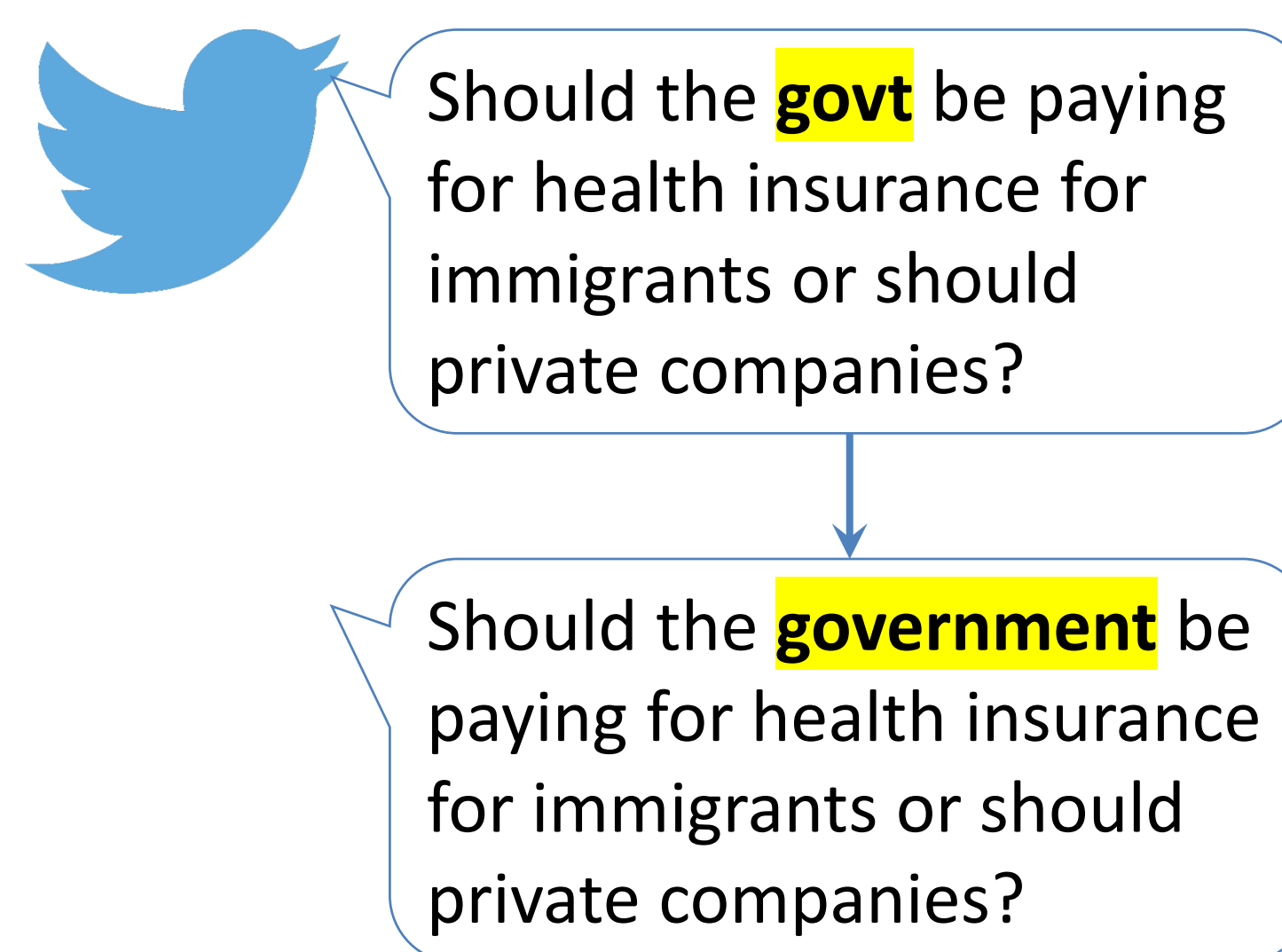
Language Model: 1.6B tweets

- Vocabulary
- N-gram language model
- Inverse document frequency
- Word embeddings

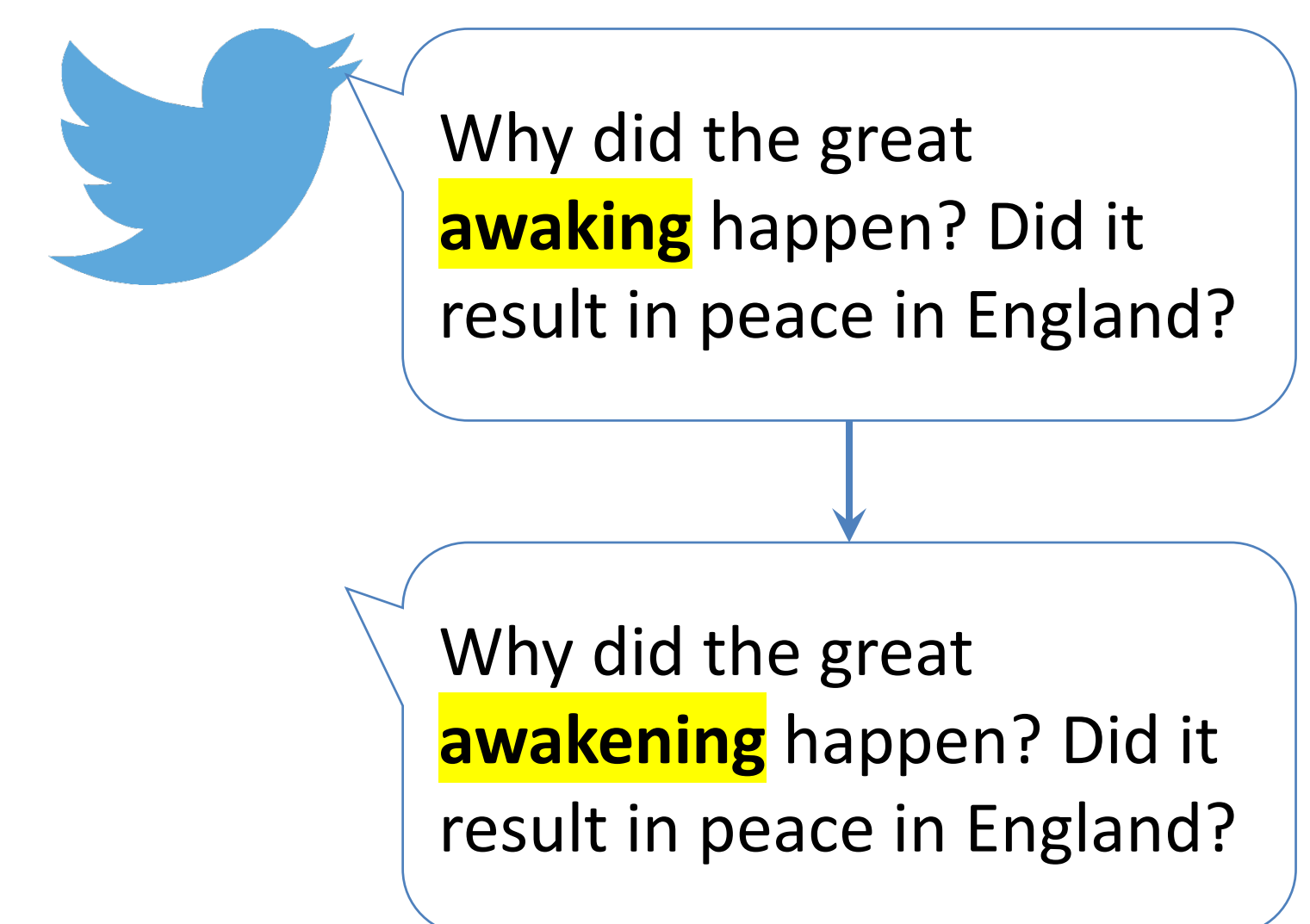
Hashtag Segmentation



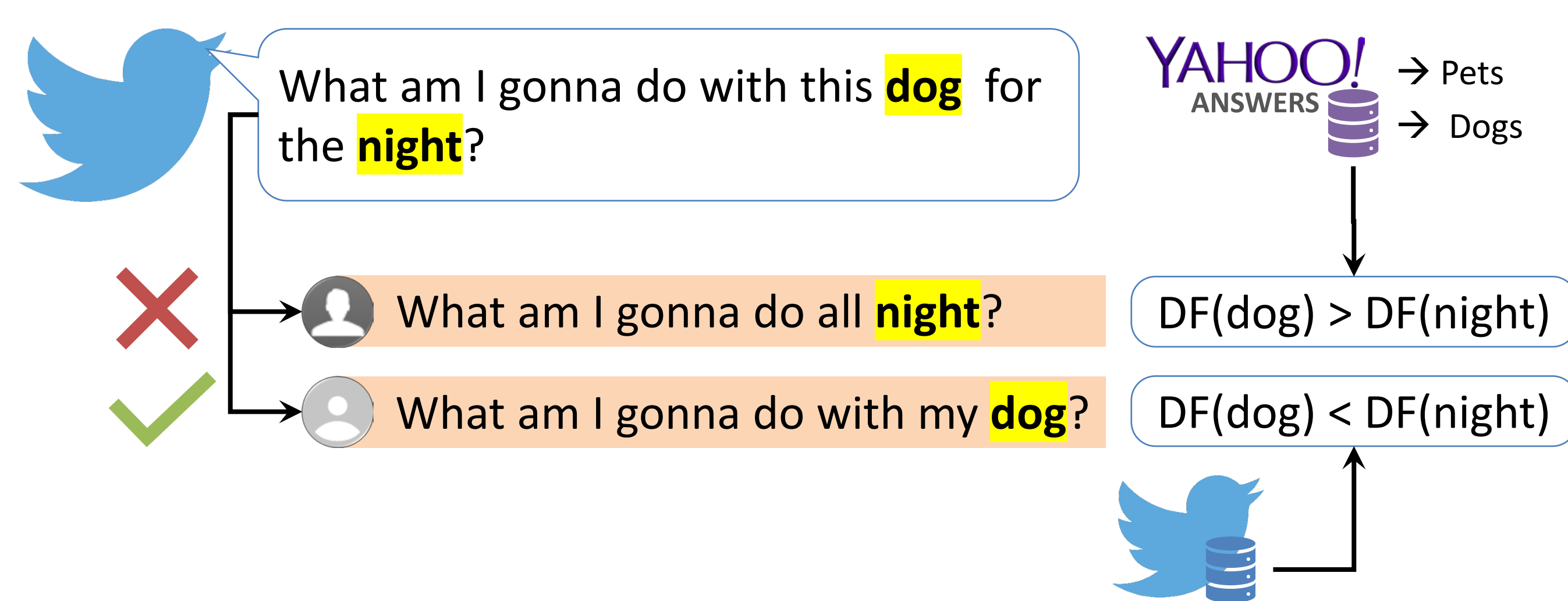
Synonyms



Misspelling Correction



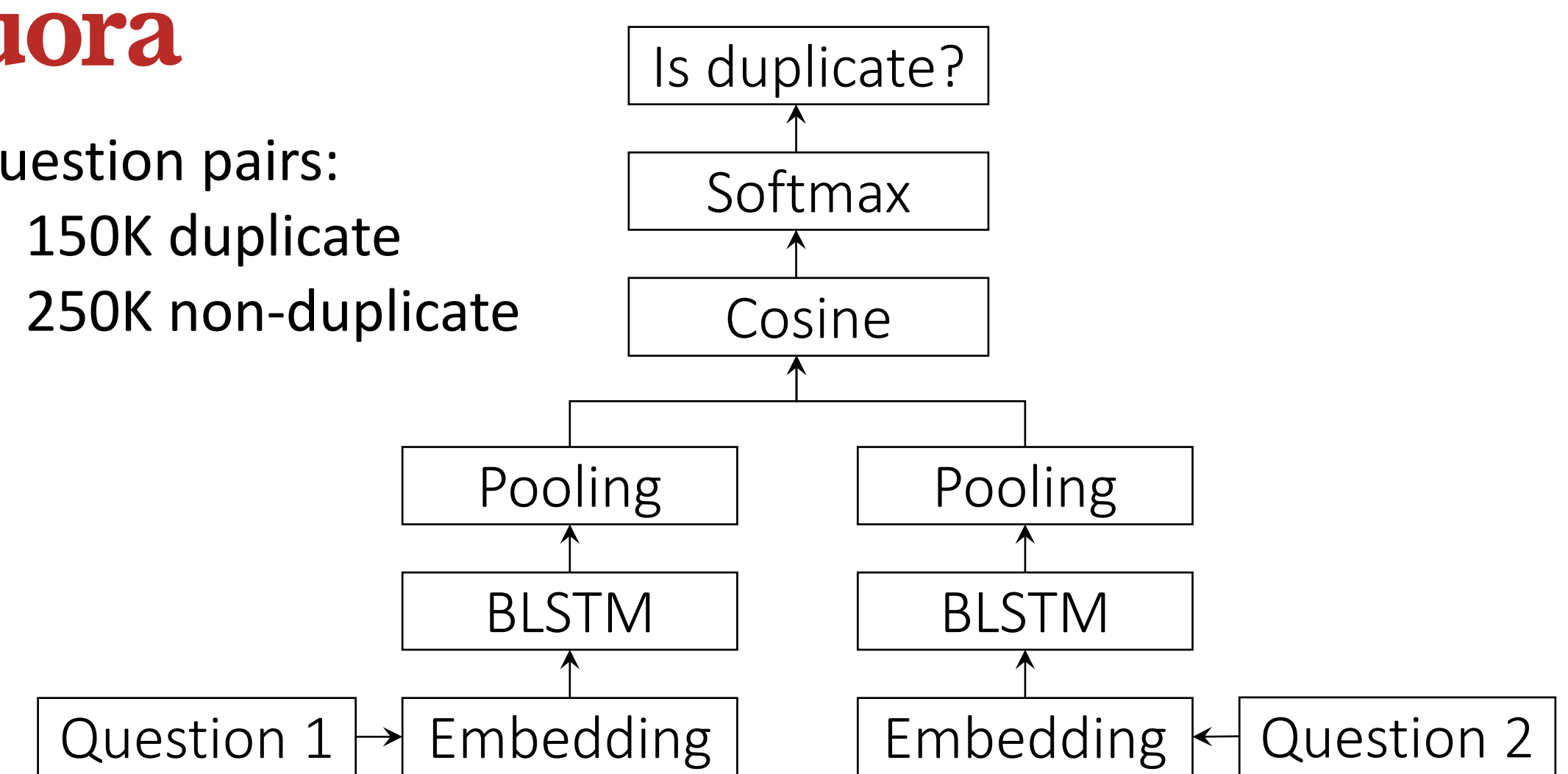
Inverse Document Frequency



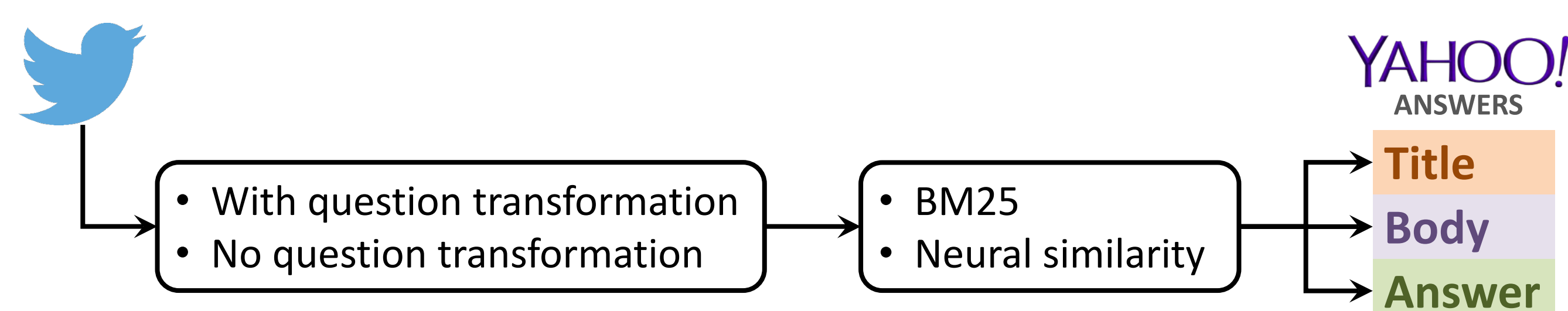
Duplicate Questions

Quora

- Question pairs:
 - 150K duplicate
 - 250K non-duplicate



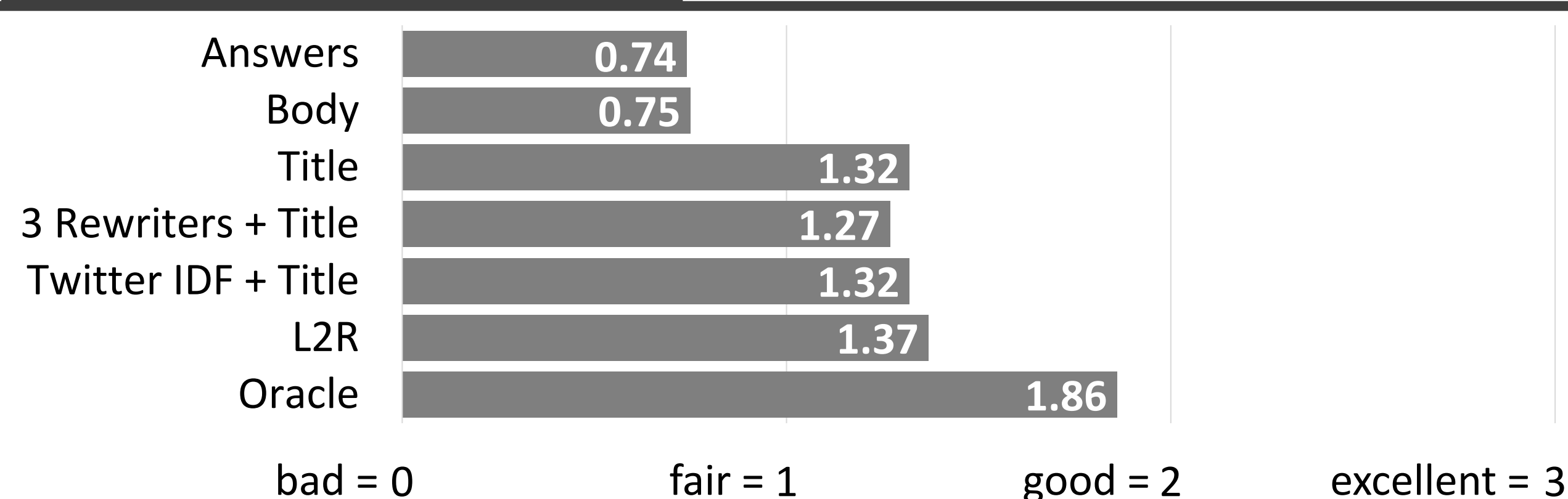
Learning to Rank



Annotations

- 362 aqweets (answerable question tweets)
- CrowdFlower workers
- 4-level relevance scale: [0 = bad, 1 = fair, 2 = good, 3 = excellent]
- Score = weighted average label

Results



- 2/3 of aqweets have an excellent answer in Yahoo! Answers
- Title is the single best field
- No improvement observed from question rewriters
- Small improvement observed from L2R
- Size of corpus limits some comparisons