

2.1

Q1: The steps for predicting ranks are roughly as follows:

1. Through corruption of either subject or object side (in this case both), we generate a list of negative triples to compare with.
2. We remove the positive triples from the negative triples list generated above (we get this from the positive filter)
3. We then compare each triple remaining with the others in the list returned from the above and rank them accordingly.

Q2: According to tutorial, the ranks are a measure of confidence, ie a rank of 7 is not as likely as a rank of 1. Therefore, with 100% correct rankings, each triple is the most likely, so all should be at the highest likelihood rank of 1.

2.2

Ordered by ComplEX, TransE, and DistMult, here are the results for the predicted relationship between 'Jorah Mormont' and 'Daenerys Targaryen':

ALLIED_WITH

SPOUSE

FOUNDED_BY

2.3

CEX ARYA NEIGHBORS ['Edrick Stark' 'Desmond' 'Gariss' 'Poxy Tym' 'Edwyn Stark']

TE ARYA NEIGHBORS ['Hayhead' 'Jonos Stark' 'TomToo' 'Quent' 'Edrick Stark']

DM ARYA NEIGHBORS ['Desmond' 'Edrick Stark' 'Poxy Tym' 'Kyra' 'Gariss']

3.1

Number of overlaps found: 15

3.2

Number of allies: 1020