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Started on Monday, 27 November 2023, 12:20 PM

State Finished

Completed on Monday, 27 November 2023, 12:29 PM

Time taken 8 mins 46 secs

Grade 9.00 out of 15.00 (60%)

Question 1

Correct

Mark 3.00 out of 3.00

According to the assumptions made for the TransE model:

- ☐ the embedding vector t shall be close to $h \circ r$ where \circ is the product of the corresponding elements h and r
- ☐ the embedding vector $h+t$ should be close to the vector r
- ☐ the embedding vector r shall be close to $h \circ t$ where \circ is the product of the corresponding elements h and t
- ☒ the embedding vector $h+r$ should be close to the embedding vector t ✓

Your answer is correct.

The correct answer is:

the embedding vector $h+r$ should be close to the embedding vector t

Question 2

Correct

Mark 3.00 out of 3.00

TransE assumes that the embeddings of both entities and relationships are in the same space R_k

Select one:

- ☒ True ✓
- ☐ False

The correct answer is 'True'.

Question 3

Incorrect

Mark 0.00 out of 3.00

The embedding vectors are

- ☐ sparse
- ☒ dense ✓
- ☐ low-dimensional
- ☒ high-dimensional ✗

Your answer is incorrect.

The correct answers are:

dense,

low-dimensional

Question 4

Correct

Mark 3.00 out of 3.00

What type of relationship pattern that can occur in a knowledge graph is represented by the following expressions:

1. Eve is Paul's sister

and

2. Paul is Anna's parent

Based on 1 and 2:

3. Eve is Anna's aunt

- ☒ composition ✓
- ☐ transitivity
- ☐ asymmetry
- ☐ symmetry

Your answer is correct.

The correct answer is:
composition

Question 5

Incorrect

Mark 0.00 out of 3.00

Knowledge graphs generally contain true statements.

Other statements (not contained in the graph) can be considered:

- ☒ false (according to the closed world assumption) but not missing ✗
- ☐ missing but not false (according to the closed world assumption)
- ☐ missing or false (according to the closed world assumption)

Your answer is incorrect.

The correct answer is:
missing or false (according to the closed world assumption)