

Word embeddings
TOTAL POINTS 4

1.Question 1

Which of the following is true about word2vec model?

- ☐ It requires human-defined semantic relations between words.
- ☐ It's outputs (predictions) are linear functions of inputs.
- ☐ It has one trainable parameter per word.
- ☐ It uses convolutional layers and pooling.
- ☒ It requires some text corpora for training.

1 point

2.Question 2

How can you train word2vec model?

- ☐ By changing order of words in the corpora.
- ☒ By learning to predict omitted word by it's context.
- ☒ By minimizing crossentropy (aka maximizing likelihood).
- ☒ By applying stochastic gradient descent.
- ☒ By learning to predict context (neighboring words) given one word.
- ☐ By minimizing distance between human-defined synonyms and maximizing distance between antonyms.

1 point

3.Question 3

Here's an online demo of word2vec model. Let's use it to find synonyms for rare words.

Don't forget to choose English GoogleNews model.

Which of the following words is in top 10 synonyms for "weltschmerz".

☐ big_bang

☒ despair

☐ decrystalization

☐ worldbuilding

1 point

4.Question 4

Which of the following is an appropriate way to measure similarity between word vectors v_1 and v_2 ? (more = better)

☐ $\sin(v_1, v_2)$

☒ $-\|v_1 - v_2\|$

☒ $\cos(v_1, v_2)$

☐ $\|v_1 - v_2\|$

1 point