Deep Learning for Natural Language Processing



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Task 1: 1.2 Data Reader

The SimLex999-based Similarity scores:

(happy, cheerful): 9.55 (happy, young): 2.0 (happy, angry): 1.28

Task 2: 1.3 Ranking Based on Word2Vec

Word2Vec-based Distances between word pairs:

(happy, cheerful): 1.1101586818695068 (happy, young): 1.2622790336608887 (happy, angry): 1.1180946826934814

Task 3: 1.4 Correlation

Pearson's correlation coefficient: -0.4718

Based on this value, the relationship between the similarity score and word2vec distance is anti-proportional, meaning that a word-pair with a high similarity score will have a smaller distance between the vector spaces.