



Natural Language Processing & Word Embeddings

	test submission grade 1%	· ·
1.	Suppose you learn a word embedding for a vocabulary of 10000 words. Then the embedding vectors should be 10000 dimensional, so as to capture the full range of variation and meaning in those words. True False	1 / 1 point
	Correct The dimension of word vectors is usually smaller than the size of the vocabulary. Most common sizes for word vectors ranges between 50 and 400.	
2.	What is t-SNE? A linear transformation that allows us to solve analogies on word vectors A non-linear dimensionality reduction technique A supervised learning algorithm for learning word embeddings An open-source sequence modeling library	1/1 point
	✓ Correct	

Suppose you download a pre-trained word embedding which has been trained on a huge corpus of text.
 You then use this word embedding to train an RNN for a language task of recognizing if someone is happy
 from a short snippet of text, using a small training set.

1 / 1 point

x (input text)	y (happy?)
I'm feeling wonderful today!	1
I'm bummed my cat is ill.	0
Really enjoying this!	1

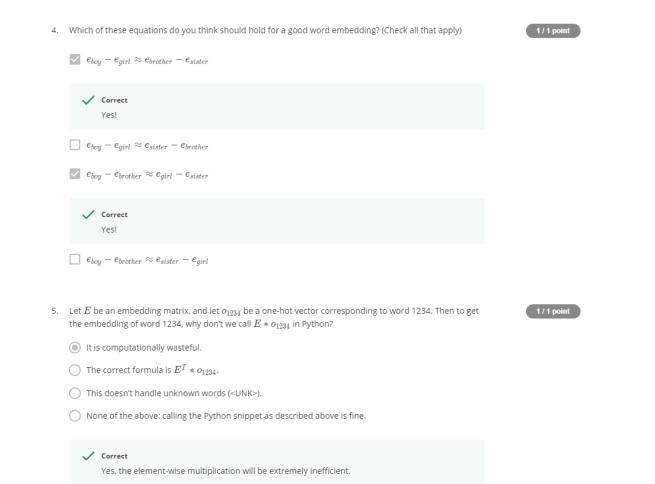
Then even if the word "ecstatic" does not appear in your small training set, your RNN might reasonably be expected to recognize "I'm ecstatic" as deserving a label y=1.







Yes, word vectors empower your model with an incredible ability to generalize. The vector for "ecstatic would contain a positive/happy connotation which will probably make your model classified the sentence as a "1".



6.	When learning word embeddings, we create an artificial task of estimating $P(target \mid context)$. It is okay if we do poorly on this artificial prediction task; the more important by-product of this task is that we learn a useful set of word embeddings. \bigcirc True	0 / 1 point
	False Incorrect	
7	In the word2vec algorithm, you estimate $P(t \mid c)$, where t is the target word and c is a context word. How	1/1 point
,	are t and c chosen from the training set? Pick the best answer. c is the sequence of all the words in the sentence before t .	(171)
	\bigcirc c is a sequence of several words immediately before t . \bigcirc c and t are chosen to be nearby words.	
	\bigcirc c is the one word that comes immediately before $t.$	
	✓ Correct	

