Congratulations! You passed!

Grade received 100% **To pass** 80% or higher

Go to next item

1. Classification allows you to identify similarity between two things while siamese networks allow you to categorize things. **1 / 1 point**

- True
- False (selected)

Correct
Correct.

2. Do the two subnetworks in a siamese network share the same parameters? **1 / 1 point**

- Yes (selected)
- No

Correct
Correct.

3. When training a siamese network to identify duplicates, which pairs of questions from the following questions do you expect to have the highest cosine similarity ? **1 / 1 point**

Is learning NLP useful for me to get a job? (ANCHOR)

What should I learn to get a job? (POSITIVE)

Where is the job? (NEGATIVE)

- Anchor, Positive (selected)
- Anchor, Negative
- Negative, Positive

Correct
Correct.

4. In the triplet loss function below, will decreasing the hyperparameter alpha from 0.5 to 0.2 require more, or less, optimization during training ? **1 / 1 point**

$$\text{diff} = \text{s}(A, N) - \text{s}(A, P)$$

$$\mathcal{L}(A, P, N) = \max(diff + \alpha, 0)$$

- Less (selected)
- More.

Correct
Correct. Alpha is the margin, so the smaller it is the less you have to optimize.

5. The orange square below corresponds to the similarity score of question duplicates? **1 / 1 point**

0.7	-0.6	-0.4
-0.6	0.4	0.1
-0.4	0.1	0.5

- False (selected)
- True

Correct
Correct. They correspond to non question duplicates.

6. What is the closest negative in this set of numbers assuming a duplicate pair similarity of 0.6? **1 / 1 point**

[-0.9,-0.4,0.4, 0.8]

- -0.9
- -0.4
- 0.4 (selected)
- 0.8

Correct
Correct.

7. In one shot learning, is any retraining required when new classes are added? For example, a new bank customer's signature. **1 / 1 point**

- (●) No
- ( ) Yes

Correct
Correct.

8. During training, you have to update the weights of each of the subnetworks independently. **1 / 1 point**

- (●) False.
- ( ) True.

Correct
Correct. You update the same weight.

9. The mean negative is defined as the closest off-diagonal value to the diagonal in each row (excluding the diagonal). **1 / 1 point**

- (●) False
- ( ) True

Correct
Correct.

10. In what order are Siamese networks performed in lecture? **1 / 1 point**

- (●)
  1. Convert each input into an array of numbers
  2. Feed arrays into your model
  3. Compare $v1, v2$ using cosine similarity
  4. Test against a threshold
- ( )
  1. Convert each input into an array of numbers
  2. Feed arrays into your model
  3. Run logistic regression classifier
  4. Classify by using the probability
- ( )
  1. Convert each input into an array of numbers
  2. Feed arrays into your model
  3. Run soft-max classifier for all classes
  4. Take the arg-max of the probabilities
- ( )
  1. Convert each input into an array of numbers
  2. Feed arrays into your model
  3. Compare $v1, v2$ using euclidean distance
  4. Test against a threshold

Correct
Correct.