

✔ 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

✔ Correct
Correct.

2. Do the two subnetworks in a siamese network share the same parameters?

1 / 1 point

- ☒ Yes
☐ 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
☐ 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

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

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

- ☒ Less
☐ 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

- ☐ True
☒ False

✔ 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
☐ 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

- ☐ Yes

☒ No


 **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

☐ True

☒ False

 **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 v_1 , v_2 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 v_1 , v_2 using euclidean distance
4. Test against a threshold

 **Correct**
Correct.