Siamese Networks

✓ **Video:** Week Introduction
46 sec

✓ **Video:** Siamese Networks
2 min

✓ **Reading:** Siamese Network
5 min

✓ Video: Architecture
3 min

📖 **Reading:** Architecture
3 min

🖥 **Lab:** Creating a Siamese Model
20 min

▶ **Video:** Cost Function
3 min

📖 **Reading:** Cost Function
6 min

▶ **Video:** Triplets
5 min

📖 **Reading:** Triplets
6 min

▶ **Video:** Computing The Cost I
5 min

📖 **Reading:** Computing the Cost I
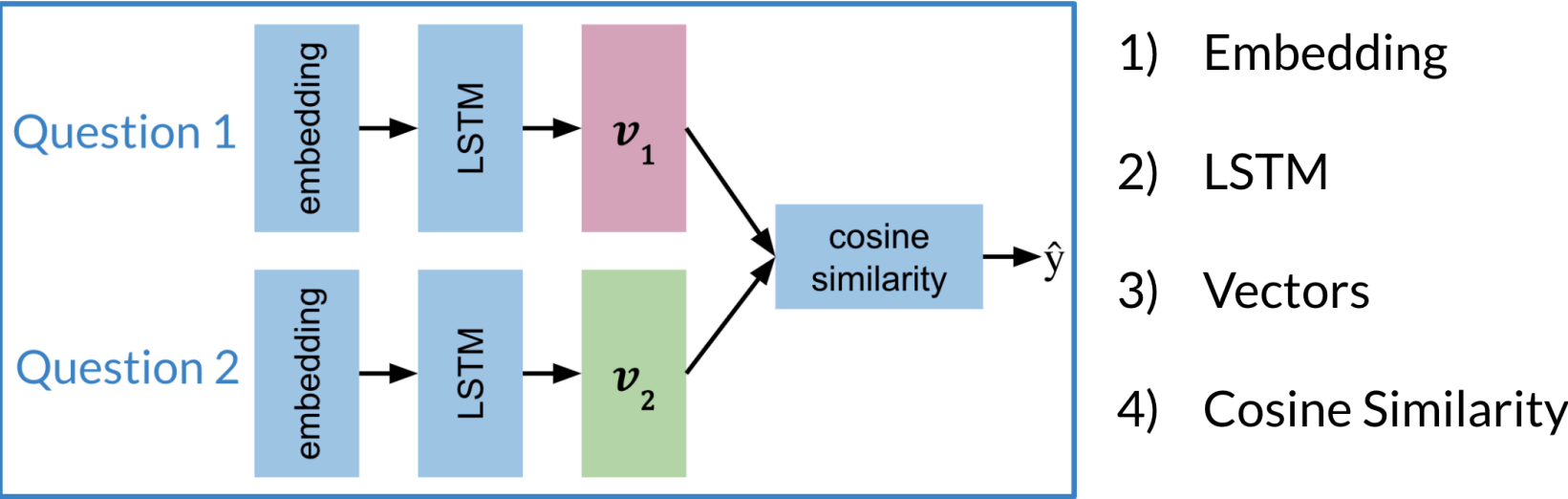6 min

▶ **Video:** Computing The Cost II
6 min

📖 **Reading:** Computing the Cost II

Architecture

The model architecture of a typical siamese network could look as follows:

These two sub-networks are sister-networks which come together to produce a similarity score. Not all Siamese networks will be designed to contain LSTMs. One thing to remember is that sub-networks share identical parameters. This means that you **only** need to train one set of weights and not two.

The output of each sub-network is a vector. You can then run the output through a cosine similarity function to get the similarity score. In the next video, we will talk about the cost function for such a network.

Mark as completed

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