Week 3 Quiz

LATEST SUBMISSION GRADE

100%

1.
Question 1
If I put a dropout parameter of 0.2, how many nodes will I lose?

1 / 1 point

20% of them

2% of them

20% of the untrained ones

2% of the untrained ones

Correct

2.
Question 2
Why is transfer learning useful?

1 / 1 point

Because I can use all of the data from the original training set

Because I can use all of the data from the original validation set

Because I can use the features that were learned from large datasets that I may not have access to

Because I can use the validation metadata from large datasets that I may not have access to

Correct

3.
Question 3
How did you lock or freeze a layer from retraining?

1 / 1 point

tf.freeze(layer)

tf.layer.frozen = true

tf.layer.locked = true

layer.trainable = false

Correct

4.
Question 4
How do you change the number of classes the model can classify when using transfer learning? (i.e. the original model handled 1000 classes, but yours handles just 2)

1 / 1 point

Ignore all the classes above yours (i.e. Numbers 2 onwards if I'm just classing 2)

Use all classes but set their weights to 0

When you add your DNN at the bottom of the network, you specify your output layer with the number of classes you want

Use dropouts to eliminate the unwanted classes

Correct

5.
Question 5
Can you use Image Augmentation with Transfer Learning Models?

1 / 1 point

No, because you are using pre-set features

Yes, because you are adding new layers at the bottom of the network, and you can use image augmentation when training these

Correct

6.
Question 6
Why do dropouts help avoid overfitting?

1 / 1 point

Because neighbor neurons can have similar weights, and thus can skew the final training

Having less neurons speeds up training

Correct

7.
Question 7
What would the symptom of a Dropout rate being set too high?

1 / 1 point

The network would lose specialization to the effect that it would be inefficient or ineffective at learning, driving accuracy down

Training time would increase due to the extra calculations being required for higher dropout

Correct

8.
Question 8
Which is the correct line of code for adding Dropout of 20% of neurons using TensorFlow

1 / 1 point

tf.keras.layers.Dropout(20)

tf.keras.layers.DropoutNeurons(20),

tf.keras.layers.Dropout(0.2),

tf.keras.layers.DropoutNeurons(0.2),

Correct