

Week 3 Quiz

Quiz, 8 questions

8/8 points (100%)

Congratulations! You passed!

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point

1.

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



20% of them

**Correct**

2% of them



20% of the untrained ones



2% of the untrained ones

1 / 1
point

2.

Why is transfer learning useful?



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

**Correct**

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

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How did you lock or freeze a layer from retraining?

- ☐ `tf.freeze(layer)`
- ☐ `tf.layer.frozen = true`
- ☐ `tf.layer.locked = true`
- ☒ `layer.trainable = false`

Correct



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point

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)

- ☐ 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

Correct

- ☐ Use dropouts to eliminate the unwanted classes



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point

5.

Can you use Image Augmentation with Transfer Learning Models?

- ☐ 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

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6.

Why do dropouts help avoid overfitting?



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

**Correct**

Having less neurons speeds up training

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point

7.

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



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

**Correct**

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

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point

8.

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



tf.keras.layers.Dropout(20)



tf.keras.layers.DropoutNeurons(20),



tf.keras.layers.Dropout(0.2),



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tf.keras.layers.DropoutNeurons(0.2),

