Quiz for Transfer-Learning

Friday, June 21, 2019 8:55 PM

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Week 3 Quiz

Quiz, 8 questions

Question 1

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1. Question 1

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

- [x] 20% of them
- [ ] 2% of them
- [ ] 20% of the untrained ones
- [ ] 2% of the untrained ones

Question 2

1
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2. Question 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
- [x] 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

Question 3

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3. Question 3

How did you lock or freeze a layer from retraining?

- [ ] tf.freeze(layer)

- [ ] tf.freeze(layer)
- [ ] tf.layer.frozen = true
- [ ] tf.layer.locked = true
- [x] layer.trainable = false

Question 4

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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)

- [ ] 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
- [x] 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

Question 5

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5. Question 5

Can you use Image Augmentation with Transfer Learning Models?

- [ ] No, because you are using pre-set features
- [x] Yes, because you are adding new layers at the bottom of the network, and you can use image augmentation when training these

Question 6

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6. Question 6

Why do dropouts help avoid overfitting?

- [x] Because neighbor neurons can have similar weights, and thus can skew the final training
- [ ] Having less neurons speeds up training

Question 7

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point

7. Question 7

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

- [x] 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

Question 8

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8. Question 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.DropoutNe6/21/19 urons(20),
- [x] tf.keras.layers.Dropout(0.2),
- [ ] tf.keras.layers.DropoutNeurons(0.2),