

Week 3 Quiz
Graded Assignment • 30 min

← Back

English ▾ Due Jun 15, 10:59 PM CST

Your grade: 100%

Your latest: 100% • Your highest: 100%

To pass you need at least 80%. We keep your highest score.

Next Item →

1. What's the primary difference between a simple RNN and an LSTM

1 / 1 point

- ☐ LSTMs have a single output, RNNs have multiple
- ☐ LSTMs have multiple outputs, RNNs have a single one
- ☐ In addition to the H output, RNNs have a cell state that runs across all cells
- ☒ In addition to the H output, LSTMs have a cell state that runs across all cells

Correct

2. If you want to clear out all temporary variables that tensorflow might have from previous sessions, what code do you run?

1 / 1 point

- ☒ tf.keras.backend.clear_session()
- ☐ tf.keras.clear_session
- ☐ tf.cache.clear_session()
- ☐ tf.cache.backend.clear_session()

Correct

3. What does a Lambda layer in a neural network do?

1 / 1 point

- ☐ Pauses training without a callback
- ☒ Allows you to execute arbitrary code while training
- ☐ There are no Lambda layers in a neural network
- ☐ Changes the shape of the input or output data

Correct

4. If X is the standard notation for the input to an RNN, what are the standard notations for the outputs?

1 / 1 point

- ☐ Y
- ☐ H
- ☒ Y(hat) and H
- ☐ H(hat) and Y

Correct

5. A new loss function was introduced in this module, named after a famous statistician. What is it called?

1 / 1 point

- ☐ Hubble loss
- ☐ Hyatt loss
- ☐ Hawking loss
- ☒ Huber loss

Correct

6. What is a sequence to vector if an RNN has 30 cells numbered 0 to 29

1 / 1 point

- ☐ The average Y(hat) for all 30 cells
- ☐ The Y(hat) for the second cell
- ☐ The total Y(hat) for all cells
- ☒ The Y(hat) for the last cell

Correct

7. What does the axis parameter of tf.expand_dims do?

1 / 1 point

- ☐ Defines the axis around which to expand the dimensions
- ☐ Defines the dimension index to remove when you expand the tensor
- ☐ Defines if the tensor is X or Y
- ☒ Defines the dimension index at which you will expand the shape of the tensor

Correct

8. What happens if you define a neural network with these three layers?

1 / 1 point

```
tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),
tf.keras.layers.Bidirectional(tf.keras.layers.LSTM(32)),
tf.keras.layers.Dense(1),
```

- ☐ Your model will fail because you need return_sequences=True after each LSTM layer
- ☒ Your model will fail because you need return_sequences=True after the first LSTM layer
- ☐ Your model will fail because you have the same number of cells in each LSTM
- ☐ Your model will compile and run correctly

Correct