Quiz_C4W3

Congratulations! You passed!

Grade received 100%	Latest Submission Grade 100%	To pass 80% or higher

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

   - ○ Y
   - ○ H
   - ◉ Y(hat) and H
   - ○ H(hat) and Y

   Correct

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

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

   Correct

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

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

   Correct

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

- ○ 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
- ○ Defines the axis around which to expand the dimensions

✓ Correct

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

- ○ Hubble loss
- ○ Hyatt loss
- ◉ Huber loss
- ○ Hawking loss

✓ Correct

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

- ○ LSTMs have a single output, RNNs have multiple
- ○ 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
- ○ LSTMs have multiple outputs, RNNs have a single one

✓ Correct

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

- ◉ tf.keras.backend.clear_session()
- ○ tf.keras.clear_session
- ○ tf.cache.backend.clear_session()
- ○ tf.cache.clear_session()

✓ Correct

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

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