Congratulations! You passed!
TO PASS 80% or higher

Keep Learning

GRADE
100%

You have new skill scores!

Great job! Keep learning and making progress in your courses to increase your skill scores.

Applied Machine Learning	266	Artificial Neural Networks	388
Computer Programming	150	Deep Learning	247
Machine Learning	314	Probability & Statistics	357
Python Programming	222	Statistical Programming	161
General Statistics	370		

Week 3 Quiz

LATEST SUBMISSION GRADE
100%

1. **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

2. **What is a sequence to vector if an RNN has 30 cells numbered 0 to 29** — 1 / 1 point

- The Y(hat) for the first cell
- The total Y(hat) for all cells
- The Y(hat) for the last cell
- The average Y(hat) for all 30 cells

Correct

3. **What does a Lambda layer in a neural network do?** — 1 / 1 point

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

Correct

4. **What does the axis parameter of tf.expand_dims do?** — 1 / 1 point

- Defines the dimension index at which you will expand the shape of the tensor
- Defines the dimension index to remove when you expand the tensor
- Defines the axis around which to expand the dimensions
- Defines if the tensor is X or 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
- Huber loss
- Hawking loss

✓ Correct

6. 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, LSTMs have a cell state that runs across all cells
- In addition to the H output, RNNs have a cell state that runs across all cells

✓ Correct

7. 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.cache.backend.clear_session()
- tf.keras.backend.clear_session()
- tf.keras.clear_session
- tf.cache.clear_session()

✓ Correct

8. What happens if you define a neural network with these two 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 compile and run correctly
- Your model will fail because you have the same number of cells in each LSTM
- Your model will fail because you need return_sequences=True after the first LSTM layer

✓ Correct