

Quiz 1

LATEST SUBMISSION GRADE

100%

1. What is the name of the API at the heart of TensorFlow.js which allows things like layers to be used?

1 / 1 point

- ☐ Core TF API
- ☐ TFJS API
- ☐ JS API
- ☒ Core API

✓ Correct

2. How does TensorFlow.js use GPU acceleration in the browser?

1 / 1 point

- ☒ You access GPU through WebGL in the browser
- ☐ You have to install GPU runtimes for each browser, and explicitly use them
- ☐ It works natively through GPU libraries in TensorFlow
- ☐ It doesn't

✓ Correct

3. How can you use a TPU with TensorFlow.js?

1 / 1 point

- ☐ You have to serve your JS from a GCP instance
- ☒ You can use Node.js on GCP and access TPU instances
- ☐ Only using Colab
- ☐ You can't

4. Which of the following lines of code will correctly add a single dense layer containing a single neuron that takes a numeric input to a model using JavaScript?

1 / 1 point



```
1 model.add(tf.layers.dense({units: 1, inputShape: [1]}));
```



```
1 model.add(tf.layers({units: 1, inputShape: [1,1]}));
```



```
1 model.add(tf.layers.dense({units= 1, inputShape: [1]}));
```



```
1 model.add(tf.layers.dense({units: 1, inputShape:= [1]}));  
2
```

✓ Correct

5. When creating data to input to a model using Python you could use a numpy array. How would you do it in JavaScript?

1 / 1 point

- ☐ Use a tensor2d containing a numpyjs array
- ☐ Use a tensor2d containing the data
- ☐ Use a numpyjs array
- ☒ Use a tensor2d containing the data and the shape of the data

6. If I train a model to detect a linear relationship (i.e. $Y=2X-1$), what line of code would output a prediction from that model for Y where X=10?

1 / 1 point



```
1 alert(model.predict(10));
```



```
1 alert(model.predict(tf.tensor2d([10])));
```



```
1 alert(model.predict([10], [1,1]));  
2
```



```
1 alert(model.predict(tf.tensor2d([10], [1,1])));
```



Correct

7. When training a model, if I want to log training status at the end of an epoch, what is the name of the callback event you want to capture?

1 / 1 point



OnEpochEnd



OnEpochEnded



EpochEnd



EpochEnded