**Week 4 Quiz**

1. **How do you add a 1 dimensional convolution to your model for predicting time series data?**

**Use a Convolution1D layer type**

**Use a Conv1D layer type**

**Use a 1DConvolution layer type**

**Use a 1DConv layer type**

2. **What’s the input shape for a univariate time series to a Conv1D?**

**[1, None]**

[]

**[1]**

**[None, 1]**

3. **You used a sunspots dataset that was stored in CSV. What’s the name of the Python library used to read CSVs?**

**CSV**

**CommaSeparatedValues**

**PyCSV**

**PyFiles**

4. **If your CSV file has a header that you don’t want to read into your dataset, what do you execute before iterating through the file using a ‘reader’ object?**

**next(reader)**

**reader.next**

**reader.ignore\_header()**

**reader.read(next)**

5. **When you read a row from a reader and want to cast column 2 to another data type, for example, a float, what’s the correct syntax?**

**float(row[2])**

**You can’t. It needs to be read into a buffer and a new float instantiated from the buffer**

**Convert.toFloat(row[2])**

**float f = row[2].read()**

6. **What was the sunspot seasonality?**

**4 times a year**

**22 years**

**11 or 22 years depending on who you ask**

**11 years**

7. **After studying this course, what neural network type do you think is best for predicting time series like our sunspots dataset?**

**DNN**

**RNN / LSTM**

**Convolutions**

**A combination of all of the above**

8. **Why is MAE a good analytic for measuring accuracy of predictions for time series?**

**It biases towards small errors**

**It only counts positive errors**

**It doesn’t heavily punish larger errors like square errors do**

**It punishes larger errors**