# Workshop 5

In this workshop we will revisit the “International airline passengers” dataset, but this time use LSTMs and compare the performance to our feedforward network.

1. Work through the following tutorial: <http://machinelearningmastery.com/time-series-prediction-lstm-recurrent-neural-networks-python-keras/>

Note that the performance, especially for some of the later models, is not that great. The author suggests that more tuning and/or epochs are required.

1. Pick one of the models in the tutorial and try tuning it or training for longer to get better performance.
2. Run some tests to compare performance with your feed-forward network from the previous workshop.

At this point there are a number of additional tutorials that we could do. If you have time they are both worthwhile, but for the sake of this workshop, just pick one:

1. Work through at least one of these tutorials:
   1. Sentiment classification. Given an IMDB review, determine if it is a good or bad review: <http://machinelearningmastery.com/sequence-classification-lstm-recurrent-neural-networks-python-keras/>
   2. Using an LSTM network to generate text: <http://machinelearningmastery.com/text-generation-lstm-recurrent-neural-networks-python-keras/>