SEIS 764 Artificial Intelligence
Assignment 6
Due: midnight 4/23/22 on Canvas

Individual effort

You will get to analyze sequential data of readings of humidity levels in a manufacturing plant. This is one-dimensional data. From your code, you can directly reference the dataset file which is saved in my Google Drive. The file ID for accessing the file from your code is 1WxkT_jgBlScTZVEmdE27VI0Bq0GPazyY

For each of the following models:

- Use T=10 and construct the dataset like we did in the class.
- Use half the data for training and the other half for validation.
- Try different optimizers, epochs, and number of units in the hidden layer (if any). However, in your submission you should have only the best hyperparameter combination that you have selected. Do not show all the hyperparameters combinations that you have tried out.
- Display the loss plot
- Display the forecasting plot
- Explain the results

Models to build:

1) Autoregressive Linear Model
2) SimpleRNN
3) GRU
4) LSTM
5) LSTM + Global Max Pooling

Submission:
- Each of the above parts should have a clear heading in your notebook.
- Your code should be well commented and easy to read (either with text cells or comments in code cell).
- Make sure each of the cells have been run with the output shown right below. Now, export the notebook as .html file.
- Submit the **.html** file and **.ipynb** notebook on Canvas.

Note: You will lose points if the notebook is not structured properly or if all the cells are not already run before converting to HTML.