

READ ME

Introduction:

This Jupyter Notebook provides the implementation and evaluation of four different configurations of recurrent neural networks (RNNs). The configurations include both Long Short-Term Memory (LSTM) and Gated Recurrent Unit (GRU) architectures, with and without dropout.

Before Running the Code

Data Path:

Inside the "Load the data" cell :

Change the path to the loaded data according to your drive location.

Modify the following lines to match the path of your data.

```
trn_path = '/content/drive/MyDrive/Colab Notebooks/PTB/ptb.train.txt'
vld_path = '/content/drive/MyDrive/Colab Notebooks/PTB/ptb.valid.txt'
tst_path = '/content/drive/MyDrive/Colab Notebooks/PTB/ptb.test.txt'
```

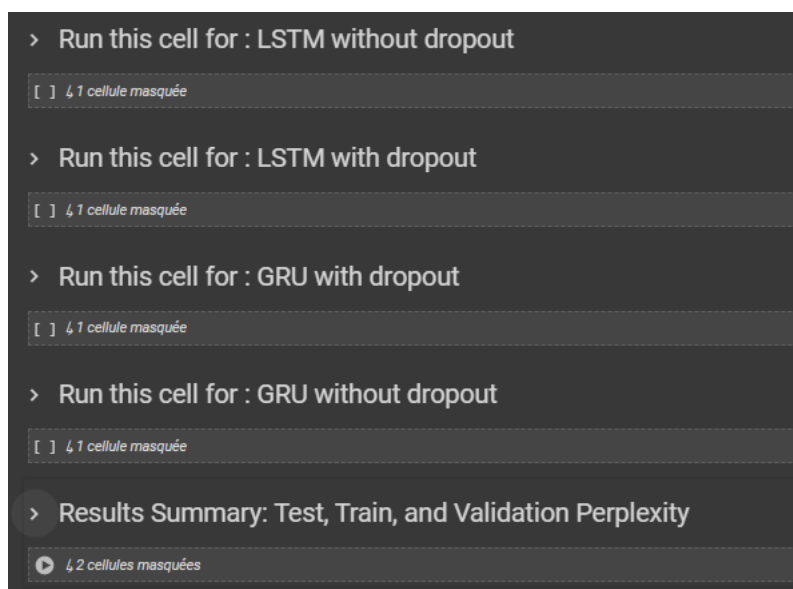
Running the Notebook

Run all cells:

This notebook should be run from top to bottom, executing each cell sequentially. Use the "Run All" option to ensure all cells are executed in the correct order.

Run Cells for Configurations:

After running all cells, you will find four cells titled "Run this cell for:" followed by the name of each configuration (LSTM with dropout, LSTM without dropout, GRU with dropout, GRU without dropout).



Execute the cell corresponding to the configuration you want to visualize.

Results Summary: Test, Train, and Validation Perplexity:

Finally, run the cell titled "Results Summary: Test, Train, and Validation Perplexity." This cell will display a table summarizing the results of all four configurations.

Note: This readme assumes that the notebook is run in a Google Colab inside a Jupyter environment.