Forecasting the Unseen: Predicting Relative Humidity With Classical and Deep Learning Approaches

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How To Run The Project

Our submission contains 2 main folders:

- **Code Folder** (contains our `IT1244_Team 2_Code File.ipynb` + other source code)
- **Model and Dataset Folder** (contains all of our models and `weather.csv` dataset)

Please first ensure you have the dependencies installed to the versions are listed in the `requirements.txt` file.

To run our `.ipynb` code file, please take the following steps.

If you are running our `.ipynb` file on Jupyter Notebook:

- Take **all** of the files present in the Model and Dataset folder, and place them in the same directory as the `ipynb` file.
- Execute the `.ipynb` in code block order (top to bottom) to load all of our models and view our plots.

If you are running our `.ipynb` file on Google Colab:

- Take **all** of the files present in the Model and Dataset folder, and place them into the *Files* tab on the left sidebar.
- Take also the `data_processing.py` file present in our Code Folder, and also place it into the *Files* tab on the left sidebar.
- Execute the `.ipynb` in code block order (top to bottom) to load all of our models and view our plots.

Please note that the `.ipynb` code file only contains the relevant code needed to visualise the various parameters and features of our model. If you would like to replicate the models on your own, please run the other source codes present in the Code Folder (those with a `.py` extension) to create the different models as labelled on your local repository. Note that a GPU is recommended when running the `.py` codes, especially for our deep learning models RNN and LSTM source code files.