

Integrative Task 2:

Sentiment analysis project

1. Objectives

- Analyze the vanilla RNN model from the data provided.
- Analyze the LSTM model from the data provided above.
- Identify the best hyperparameters for each of the above models.

2. Methodology

For this project, the Dummy Classifier was initially applied to determine the basis of how the data could behave with the other models, followed by the structuring of each of the models with previously established hyperparameters.

3. Results

LSTM:	Vanilla RNN:
Accuracy Score: 0.48	Accuracy: 0.70
Precision Score: 0.48	Precision: 0.73
Recall Score: 1.0	Recall: 0.61
F1 Score: 0.65	F1 Score: 0.66
Kappa Score: 0.0	Kappa Score: 0.41

4. Conclusion

LSTM does not fit the given task in the best way, possibly because the hyperparameters with which the model was designed are not the best to make predictions in this particular case, and we can say this because of the powerful model that LSTM is.

For future occasions, we hope to spend a little more time, through trial and error, and the results of the SearchGrid, to test other combinations of hyperparameters to improve the accuracy of the model LSTM in the classification of sentiment