The model I have used is a bert-base-uncased, using the “Utilizing BERT for Aspect-Based Sentiment Analysis via Constructing Auxiliary Sentence” as a reference I tried making a model for every single location aspect pair like they have done in their paper.

So the model performs well when it comes to identifying sentiments basically text classification around 90% accuracy overall when it comes to sentiment analysis. Since it is a bert model its performance is generally better than LSTMs or RNNs as it is pretrained.

The model does not use deep learning for other aspects at all, using normal python functions we segregate the dataset for each aspect and train separate models for each location-aspect pair and during prediction we run all the models and chose the one which is appropriate. This model has several drawbacks a few of them being,

If either of the locations are not mentioned in the train dataset the model will not use those sentences for training, now this limits the models from learning sentences where the names aren’t mentioned specifically and only in a context.

The training and testing is very slow as it iterates over every model and is probably not the most optimal way to approach a problem like this in real world as it would not be feasible for bigger datasets.