Opinion Mining with Twitter Data:

April 2020 – May 2020

* Topic: How people are reacting to the changes due to COVID-19 pandemic.
* Details: 1. Data extraction using Twitter API. 2. Data Preprocessing: Removing URLs, spaces, emotion symbols, images, tags, punctuations, removing any NA. 3. Data Labelling: Tweets as positive and negative based on QDAP dictionary. 4. Data Balancing: Balanced the data for both positive and negative tweets. Data Partitioning: Divide the data into training set 80% and test set 20%.
* Natural Language Processing: Tokenization, Vectorization
* Model Building: Deep learning methods like Embedding Layer Dense Model, LSTM, RNN.
* Accomplishments: Hypertuning the model using L-2 regularization gave best performance.
* Tools Used: R, Google Cloud, Keras-library, Excel.