

# Abstract

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The focus of this project is to investigate the concepts of neural networks and deep learning. The aim is to implement these concepts to perform sentiment analysis on Twitter posts, tweets. The structures currently that exist to perform sentiment analysis are optimised for large bodies of text. Tweets are by their nature short and thus difficult to classify the sentiment. The objective of this project is to improve the ability to classify tweets by creating and training a system specifically for tweets. This means that the model will be catered to processing and classifying tweets. These tweets were also processed using natural language processing to enable the model to interpret the text. This model will then be compared against the state of the art in the sentiment analyse to analyse its performance against models not trained on tweets. This shows the effect of training models with different data and the effect of different models of text processing.

**In Depth Analysis of Deep Learning for Sentiment Analysis on Twitter**

*Using the Concepts of Deep Learning to Perform Sentiment Analysis on Twitter*

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