

Project name: Sentiment analysis on twitter tweets about COVID-19 vaccines using NLP and supervised KNN classification algorithm

Review:

Why they have conducted this research: The research was conducted to analyze the sentiment of people on Twitter regarding the safety and effectiveness of the COVID-19 vaccines produced by Pfizer, Moderna, and AstraZeneca. With the widespread use of social media, it has become a common platform for people to express their opinions and feelings about various topics, including the COVID-19 vaccines. By analyzing these tweets using natural language processing (NLP) and a supervised KNN classification algorithm, the study aimed to provide insights into the general public's sentiment towards the vaccines.

Previous research gap: While the paper provides an interesting analysis of public sentiment about the three approved COVID-19 vaccines (Pfizer, Moderna, and AstraZeneca) on Twitter, there are a few potential research gaps.

Architecture: In this research paper does not mention what architecture used in the classification algorithm. It just mentions that a supervised KNN classification algorithm is used for sentiment analysis of the processed data.

How the result are experiment: The analysis was done on a dataset of 5000 tweets for each vaccine. The results show that for all three vaccines, the majority of tweets are in the positive and negative categories, with a smaller proportion in the neutral category. Pfizer has the highest percentage of positive tweets at 47.29%, followed closely by Moderna at 46.16%. AstraZeneca has the lowest percentage of positive tweets at 40.08%. The negative sentiment is highest for Moderna at 40.71%, followed by Pfizer at 37.50%, and AstraZeneca at 40.06%. The neutral sentiment is the lowest for Pfizer at 15.21%, followed by Moderna at 13.13% and AstraZeneca at 13.86%.

Future plan any research lacking: While the current study provides valuable insights into public sentiment towards COVID-19 vaccines, there are several areas where future research could expand upon and improve upon the current findings.