DISCOURSE ANALYSIS USING A TF IDF-ANN BASED MODEL TO PROBE THE ANTI VACCINE DEBATE:

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Abstract:
In 2020 we witnessed how a pandemic was able to overthrow our lives and pushed all human life indoors.Scientist and doctors alike worked hard to save lives and endured sleepless nights to come up with a vaccine which according to them gave the ordinary people a sword to fight against the pandemic that took too many of our loved ones.
But the sentiment was not welcomed by all. Vaccinations were seen by some people as not just a sword to fight against such catastrophes but instead a double edged sword that endangers the people too.After all to them the vaccine itself was made by humans alike and humans are subject to errors and they throw their claims in the internet some with proof they found and some with lack of substantiation. Understanding how anti-vaccine advocates successfully persuade parents against vaccinating their children can provide insight into communication tactics that could be incorporated into vaccine promotion efforts. The internet is an important source of vaccine information for many parents, and plays a role informing vaccine hesitancy.

Our project focuses on argument mining for identification and classification of arguments within social media posts to find why people are against the vaccine or why they support it.
It uses a fully connected neural network which is a sequential model .
After processing the dataset, we assign weights to the corpus using TF-IDF. Then instead of computing the scores, the weighted dataset is then provided to model. Now the data set is ready for training. While training ,the bias and the weight will be altered in accordance to the result by the model.The layers will be equipped with activation functions.Thus we will be using dense layers as both input and activation functions are taken into account.

Our expectation is to derive the general consensus of people regarding this controversy and test the accuracy.