

# HOW THE FAKE NEWS DETECTION MODEL WORKS

The Fake News Detection is done using a Bidirectional LSTM model and the news/tweet data is first tokenized and processed using an NLP technique known as Lemmatization.

The Lemmatized and Tokenized data is passed to the Bidirectional LSTM model and the model identifies the words which lead to the said label of Fake or True and tries to learn various trends based on the data provided to it.

Based on this analysis, it makes a numerical prediction from 0 to 100, where 0 is totally fake and 100 being totally true.

For ease of use in our deployment, I have set it so that if the news/tweet provided is completely Fake i.e., model gave it a score of 0, then the User Will see the text:

The Entered news is Fake with a score of 100%

And if the news is completely Real, i.e., model gave it score of 100, then the user sees the following output:

The Entered news is Real with a score of 100%

Examples of a few tweets/news and their prediction by the model is given below:

## 1. News/Tweet:

Local residents complain that Greenidge, a gas-fired power plant by Seneca Lake, is warming the water and polluting the air, NBC News reported.

Local residents have blamed bitcoin mining for heating up the largest of the Finger Lakes in upstate New York, with one saying it's "so warm you feel like you're in a hot tub," according to a report by [NBC News](#).

Model Prediction:

The Entered news is Fake with a score of 99%

## 2. News:

Walmart said that the retailer would accept Litecoin as online payment and cited Litecoin's creator.

Model Prediction:

The Entered news is Fake with a score of 100%

### 3. News:

Ethereum has decided to buy the bitcoin network and to name it "ETHBTC" under its own network.

Model Prediction

The Entered news is Fake with a score of 85%