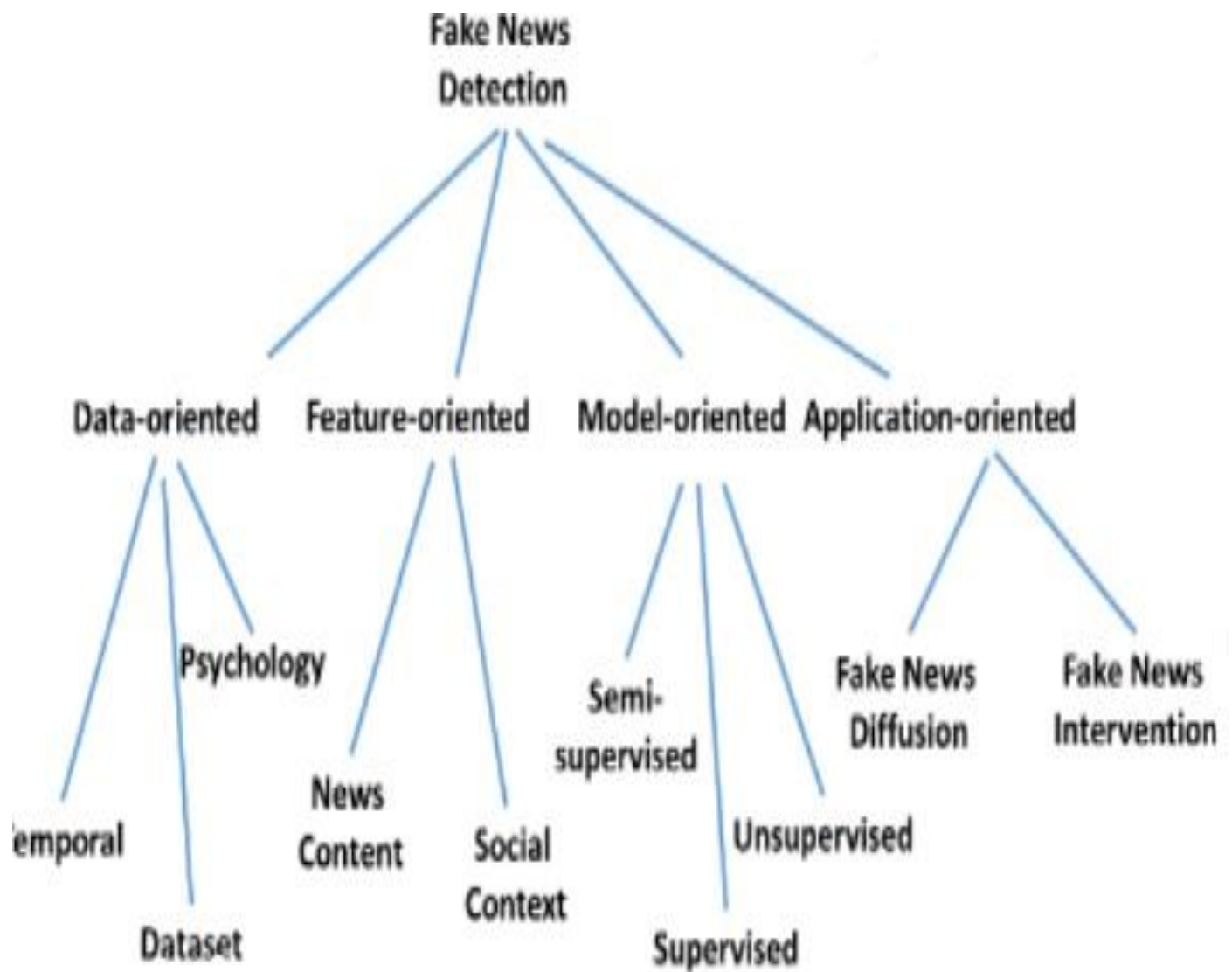


FAKE NEWS DETECTION MACHINE LEARNING MODEL USING PYTHON



WORDS FROM THE DESIGNER

As a python programmer and Machine Learning enthusiast, I decided to apply my ideas to design a ML model that could distinguish the real news from the fake one. First and foremost, more than 20000 news article data sets were imported from Kaggle. Real news was labelled 0 and fake news 1. Then, I focused on data preprocessing which was code intensive and then incorporated an 80-20 train-test split model. Subsequently, a trained logistic regression model was designed since this is a binary classification project. The use of sigmoid function was also crucial as I used the trained logistic regression model to predict whether the new data (new news) was real or fake. Eventually, I became able to design a predictive model with around 98% accuracy.

SIGMOID FUNCTION USED:

$$Y = 1/(1+e^{-z})$$

$$Z = w \cdot X + b$$

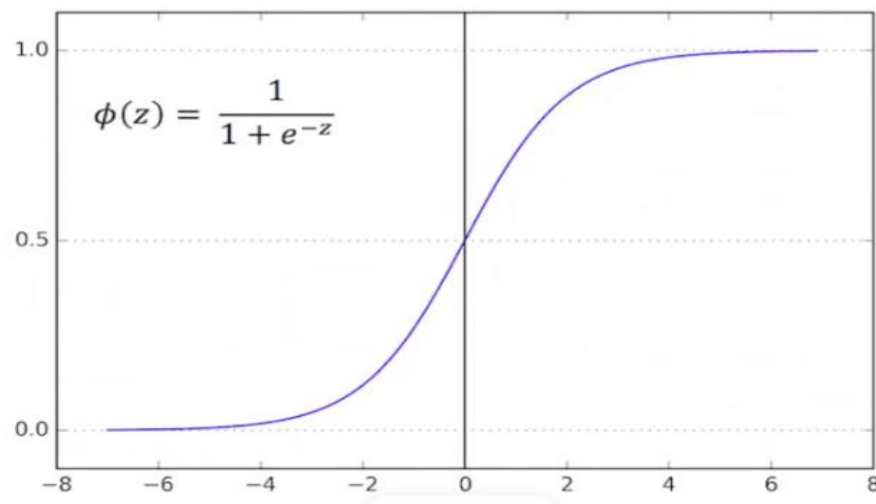
Where,

X = input features (news data)

Y = Prediction probability

W = Weights (importance)

B = Biases



PROJECT LINK

[https://colab.research.google.com/drive/1cNIPaEss4m_xF9ANzt5sivUa13ilwAMv?
usp=sharing](https://colab.research.google.com/drive/1cNIPaEss4m_xF9ANzt5sivUa13ilwAMv?usp=sharing)

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