

A Deep Learning Approach with LSTM and GloVe

**Project Presentation** 

Janakar Patel-20BIT061 Abhi Prajapati-20BIT058 Kishan Munjpara-20BIT010 Krish Vasoya-20BIT027 Sakshi Gajera-20BIT154D



**Project Motivation** 

## Why this Project ?





Leading Doctor Reveals the No. 1 Worst Carb You Are Eating Mediconews



The \$\$\$ Moneymaking Secret that Banks Don't Want You To Know Bankfacts



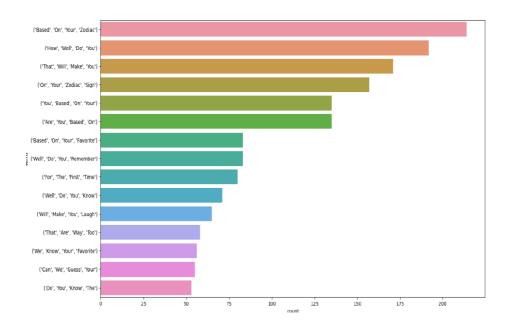
These 12 Impossible Pet Rescue Stories Will Melt Your Heart! Cutepups Inc

- Clickbait news titles have become pervasive in online media.
- Often misleading readers and contributing to the spread of misinformation.
- COVID-19 also increase the clickbait content and influencing people with wrong information.



**Project Implementation** 

# How we Determine Clickbait?



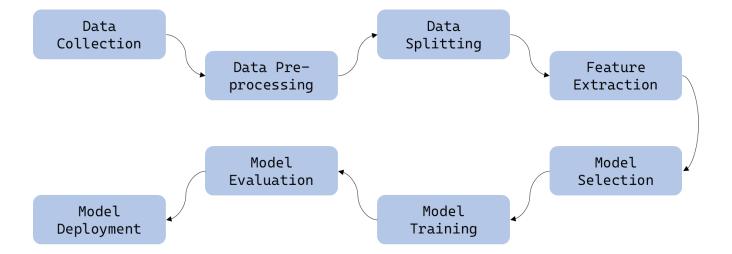
- Click-bait is a term used for headlines or titles that are designed to attract attention and encourage people to click on a particular link.
- Click-bait titles are often sensational or misleading, and the content of the article does not match the expectation created by the headline.
- By analyzing the dendrogram, we can identify the most significant clusters
  of words and use them as inputs for our model.
- It is not a single word that determine the clickbait but it is a sequence of word that we use to determine the clickbait.





**Methodology** 

## Steps for Project



- This steps of methodology for model creation and model deployment. It includes total 8 main steps.
- Model Creation and deployment steps involves the major part of the time.

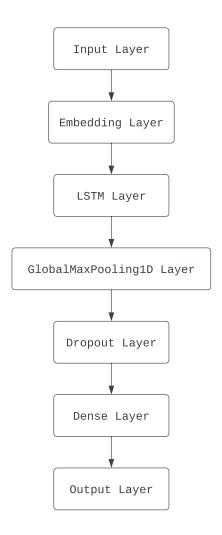




GloVe and LSTM Integration

### Model Architecture

- Long Short Term Memory used with GloVe.
- Dropout is used to avoid Overfitting.
- GloVe is used at embedding layer.
- LSTM layer to the most of the computation for finding required pattern.



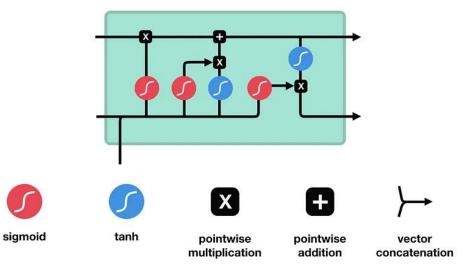
**Model Architecture** 





GloVe and LSTM Integration

Why Long
ShortTerm
Memory ?

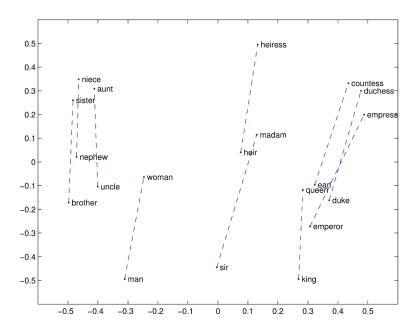


- Its inherent strengths and suitability for sequence data.
- Sequential Data Handling
- Capable of learning complex patterns.
- Perform well in natural language processing (NLP) tasks.



GloVe and LSTM Integration

GloVe -Global Vectors for Word Representation



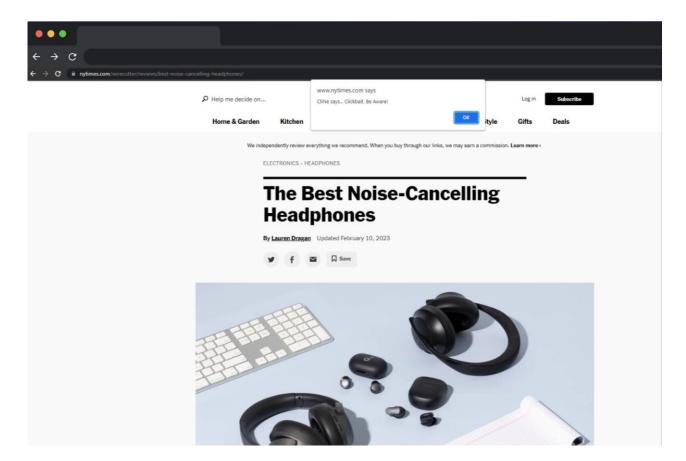
## GloVe – Global Vectors for Word Representation Represent words as dense vectors in a continuous vector space, where similar words are represented by similar vectors.

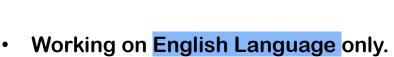
- 1. Pre-trained Embeddings
- 2. Semantic and Syntactic Relationships
- 3. Dimensionality Reduction
- 4. Improve model Accuracy
- 5. Reduce the Training Time



**Limitations and Future Work** 

Limitations of this Project.





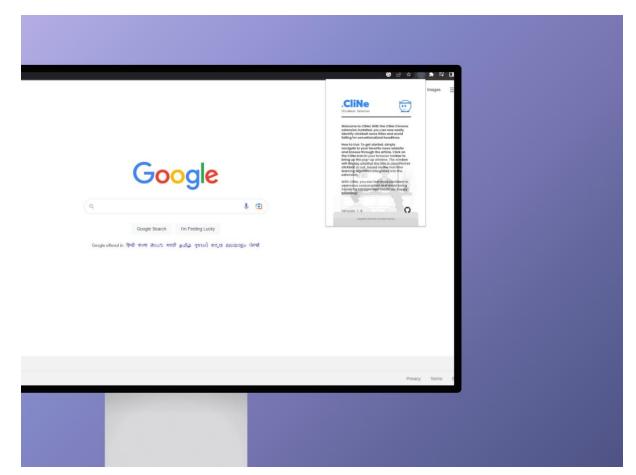
- Predicting only News Titles.
- Some bugs in Chrome Extension.





### **Limitations and Future Work**

### Future Versions



- Better UX/UI for user, easy navigate through option.
- Customization option, It detect on user's selected text.
- YouTube Clickbait Title Detector.
- Can Detect text that is generated by AI.







## Thank You very much

For your important time.

-Team CliNe

