

DETECTION OF CYBERBULLYING ON SOCIAL MEDIA PLATFORMS

TEAM – 10

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PROBLEM STATEMENT

- ❖ In today 's time social media platforms have taken over our lives. The number of people using these platforms keeps on increasing day by day.
- ❖ With the increase of **social media usage**, the person who is using these platforms become more exposed to the negative effects of using social media.
- ❖ Among many negative effects, **cyberbullying** is one of the major negative effects of using social media. People online get **bullied** which affects their mental health in a negative manner.

EXISTING SOLUTION

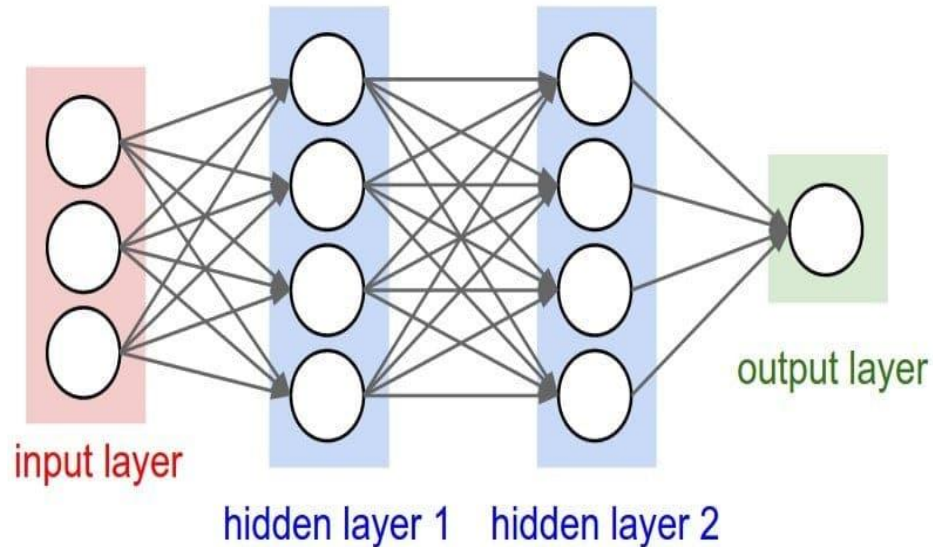
Existing works have heavily relied on traditional machine learning models for cyberbullying detection. They also have at least one of the following three bottlenecks.

- ❖ Target only one particular social media platform (SMP).
- ❖ They address just one topic of cyberbullying.
- ❖ They rely on carefully handcrafted features of the data.

PROPOSED SOLUTION

- ❖ This project will use the DNN models to increase the performance compared to other machine learning methods.
- ❖ We pre-process the data, subjecting it to standard operations of removal of stop words, punctuation marks and lowercasing, before annotating it to assigning respective labels to each comment.
- ❖ Transfer learning to check if the knowledge gained by DNN models on one dataset can be used to improve cyberbullying detection performance on other datasets.

DEEP NEURAL NETWORKS(DNN)



Deep Neural Networks (DNNs) are typically Feed Forward Networks (FFNNs) in which data flows from the input layer to the output layer without going backward and the links between the layers are one way which is in the forward direction and they never touch a node again.

TOOLS AND TECHNOLOGIES

PLATFORM:

Microsoft Visual Studio Code

LANGUAGE:

Python

ALGORITHM MODEL:

CNN, GloVe

LIBRARIES:

Numpy

Pandas

TensorFlow

Scilearn

Keras

REFERENCES

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- ❖ C. Nobata, J. Tetreault, A. Thomas, Y. Mehdad, and Y. Chang. Abusive language detection in online user content. In *WWW*, pages 145–153, 2016.