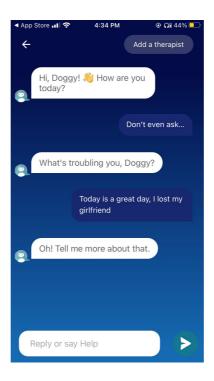
# **ChatBot Problems**

#### Sarcasm Identification

Identifying sarcasm in a short series of text is still a challenge faced by multiple businesses. Usually in case of a sentence, the algorithm tries to find contrasting words in order to identify sarcasm. In the case of a conversational bot, previous message can also be given a certain score in order to classify upcoming messages as sarcasm or not.

For ex: I'd already messaged *Dont even ask...* and in the next message I was being sarcastic, the ai can assign some score to initial message in order to classify further conversations.

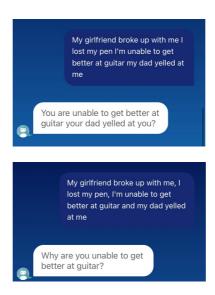


 $\underline{\text{https://www.researchgate.net/publication/319620213\_Detection\_of\_Sarcasm\_in\_Text\_Data\_using\_Deep\_Convolutional\_Neural}$ 

### Segmenting sentences

Being able to correctly segment sentences is essential in making the bot not feel autonomous, it'll replicate a human better that way. Here's an issue which arises when proper segmentation of sentences isn't done appropriately.

The bot is able to segment sentences properly when there's punctuation, however for cases where there's no punctuation, it confuses and merges two different sentences.



ChatBot Problems 1

## Remembering Information // Irrelevant information

Another add-on after segmenting, can be implementation of an emotion detection for each segmented sentence, then ranking emotions a certain value at the backend in such a manner that extreme emotions have a heavy score as compared to light ones. Example: Heavy  $\rightarrow$  Anger, Motivated light  $\rightarrow$  grateful etc.

This would help in filtering out sentences which are not of high value, so that the bot can converse and tackle, help the user with finding solutions to problems troubling them.



Lot of information at once

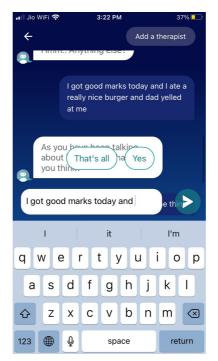


Random text prompt

### Misc

UI : Overlapping elements. Could make the responses button stick to the bottom of the conversation or freeze the screen so that the responses always appear at the bottom.

ChatBot Problems 2



Overlapping Elements

ChatBot Problems 3