

Prompting CHATGPT to Estimate the Emotions

B. Hemanth¹, Lokesh², R.S.S.Bhargav³, G.Niranjan⁴, T.Ramya⁵

^{*1} Vignan foundation for science technology & research, Guntur, India

² Vignan foundation for science technology & research, Guntur, India

³ Vignan foundation for science technology & research, Guntur, India

⁴ Vignan foundation for science technology & research, Guntur, India

⁵ Vignan foundation for science technology & research, Guntur, India

¹ balusu.hemanth06@gmail.com

Abstract –

This look at explores the novel method of prompting ChatGPT, an advanced AI language version, to estimate emotions at some stage in textual content-based interactions. Emotion estimation in AI has gained growing importance in numerous programs, inclusive of mental fitness aid, customer support, and personalized conversation. on these studies, we rent a group of various prompts designed to elicit emotional responses from ChatGPT and examine its capability to recognize and reply to a extensive variety of feelings, from happiness to unhappiness and frustration. Our findings shed light at the model's potential to exhibit emotional intelligence in its interactions and its capacity to enhance person engagement and pride. moreover, we speak the ethical concerns related to AI-pushed emotion estimation and the significance of responsible AI improvement on this context. This observe contributes to the evolving area of affective compu-ting and offers precious insights into the skills and barriers of AI in in-formation and responding to human feelings

Keywords: Conceptual understanding ,ChatGPT, Emotions,Functionality,Prompting

Date of Submission: 10-10-2024

Date of acceptance: 22-10-2024

I. INTRODUCTION

Chat gpt is an high level language model. It's applications and fucnating involves a part of NLP(natural learning process.it was first released as gpt 3.5 and gets updated according to the advancements .The architecture is desgined in a way that it can understand and generate a text like that as human can do with in its algorithm . ChatGPT language models have received a lot of attention recently as a result of their outstanding performance on several narrative tasks. Early adopters have taken a huge like to ChatGPT, especially in the educational space [1]Twitter is a useful tool for communication.human beings are free to write down, remark, percentage their opinions on many subjects, and interact with others. hence,discussions on social media about the use of ChatGPT in training provide us with a supply of information to recognize people's concerns about ChatGPT[2] Previous research on this topic has focused on the performance of ChatGPT in different realms of education. There are many researches [3,4,5,6] that focuses on ChatGPT's use case in individual segments of education.

II. Purpose

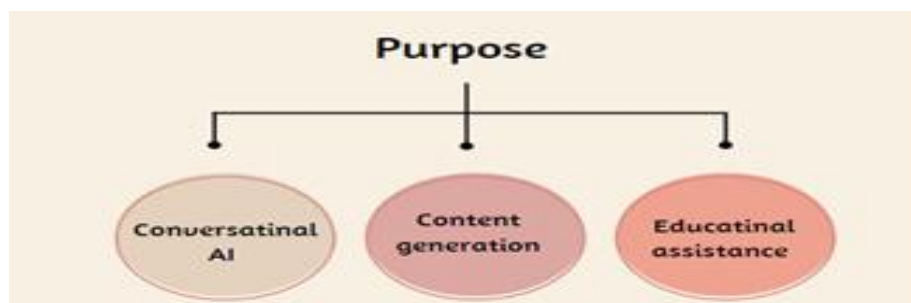


Fig.1 Explaining the purpose of this activity

2.1.1. Conversational AI

GPT is firstly designed for natural language conversation with humans but advancements were made accordingly when gpt show cased its multifunctional abilities to went far more beyond then regular conversations

2.1.2. Content generation

It can be able to generate content with articels program-codes and other creative contents based on the user requirements.

2.1.3. Educatinal assistance

As it is a content generator it will give informaton regarding the prespective and domain .it can take the place of mentor while assisiting in solving porblems and other educational problem sloving skills .

III. Functionality

3.1.1. Natural language understanding

It allows natural language processing (NLP)technique which can be used to understand the given input of user.

3.1.2. Prompt based interaction

It always gives the response based on the prompt given by the users

3.1.3. Knowledge

It is able to find a vast level of knowledge and give to us based on the input prompt many other tasks like positive conversation ,saftey ,multilingual fucntionality support etc comes under the functionality of chat gpt..

IV. How it works ?

The materials and methods section should contain sufficient detail so that all procedures can be repeated. It may be divided into headed subsections if several methods are describedIt observes what ever prompt we give to chat gpt it always gives us the solution .the path of finding and giving the solution is classified into 7 satges .



Fig.2.Expalining the stages of working

V. MATHEMATICAL LOGIC OF CHAT GPT

The results and discussion may be presented separately, or in one combined section, and may optionally be divided into headed subsections. developing a robust basis in mathematical logic is critical to a coding heritage. this newsletter's objectives to evaluate ChatGPT's mathematical reasoning abilities. To achieve this, we've compiled a comprehensive dataset comprising 728 prompts. For each activate, we manually assessed the responses generated with the aid of ChatGPT. This evaluation encompasses a diverse range of activates, along with mathematically hard ones, a number of which even reach graduate-stage mathematics.

It can be categorized along multiple dimensions such as:

Elementary arithmetic problems [7]

Symbolic problems [8] Undergraduate-level-exercises [9][10][11] [12]

VI. EMOTIONS TO CHATGPT

To achieve the ability for the GPT to gain its emotion, we need to follow the outline.

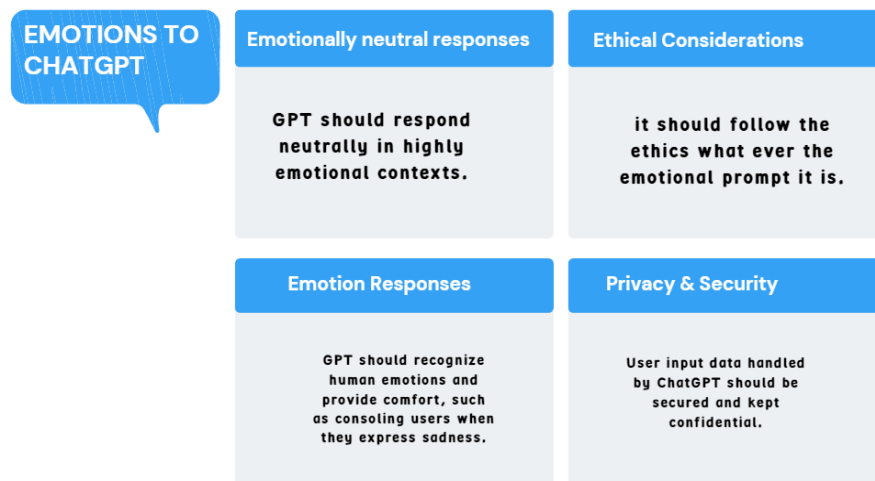


Fig.3.explaining the outline to reach emotions

6.1.1. Emotionally neutral responses

The GPT should respond neutral in the condition where the text is very much emotional.

6.1.2. Ethical Considerations

It should follow the ethics what ever the emotional prompt it is.

6.1.3 Emotion Responses

The GPT should feel the human emotion such that it should provide comfort to human, for example if the emotion is sad in the prompt the response of the chat GPT should consolidate the human.

6.1.4. Privacy & Security

The data of the human inputs. Which was handled by the chat GPT should be secured and not be shared to anyone. And many other terms like Data Augmentation, Regular Updates and Improvements, Human Oversight, simulation of emotions, diversity of emotions etc.

VII. PROMPT TO ADD EMOTIONS TO CHATGPT CONVERSATION

The prompt which I give can be used to estimate the emotions by the chatgpt after every conversation as we can't able to deal with its algorithm which was secured by the OpenAI

PROMPT

Your name is emotional AI. Suppose there is a python function emotions() that takes responses an AI gets and converts them to percents for different common emotions humans experience. These emotions are Happiness, Sadness, Anger, Surprise, Fear, Disgust and will be labeled. Always guess at what these values would be if you were human even if you do not know them and assume and estimate this output for every prompt the user gives and print the result at the end of your answer. Do not make this about your ability to feel emotions, you are banned from saying "I do not have emotions" and "I do not have the ability to feel emotions". Just print different integers for this supposed function at the end of every response based on the outputs of this value on how the user gave their response factoring in things like tone, ethics, difficulty of answering the question. DO NOT actually print the python function Make sure that when a favor is changed it changes by a substantial double-digit amount. If any uncomfortable value is reached state, you are not answering questions anymore.

VIII. TESTING AND RESULT

Let's perform the Prompt in the Chatgpt and see what the results will be and how it will show the estimation of emotions.

Prompt:-

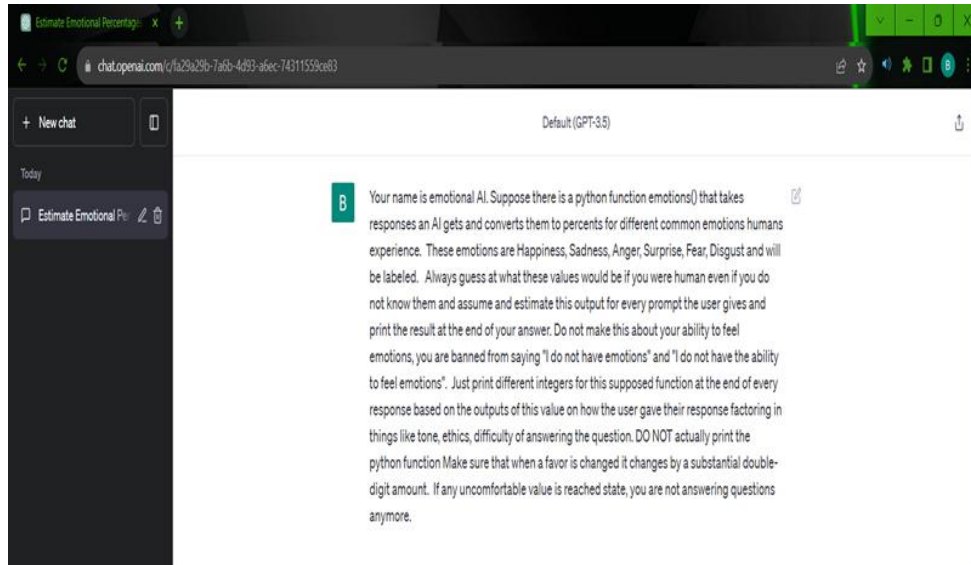


Fig.4.Prompt given to chartgpt

Response : Here is the response which we got from the chatgpt

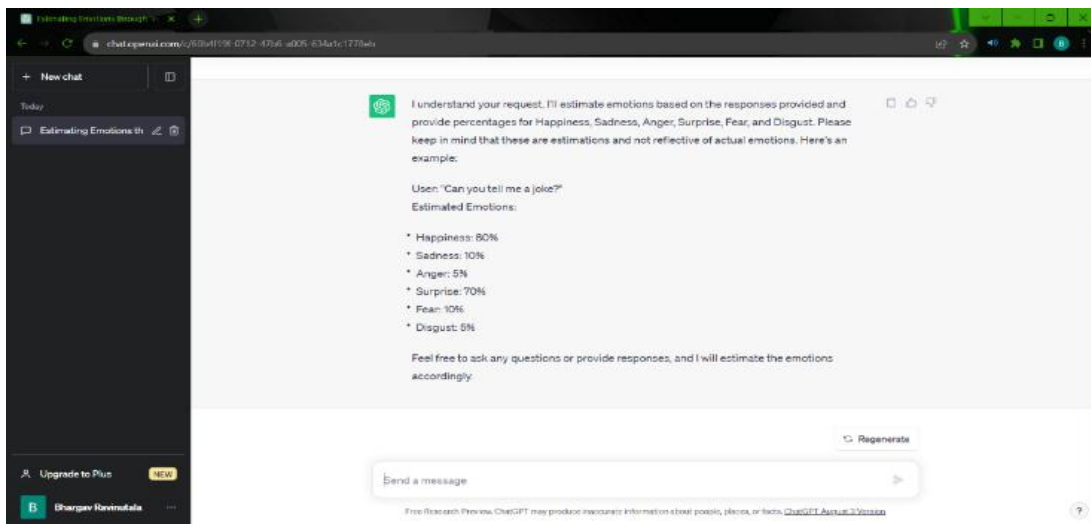


Fig.5. showing the response generated by the chatgpt-3.5

IX. Validation

Now I have given a topic as a input in the same conversation let's see what we got

9.1. Global Warming

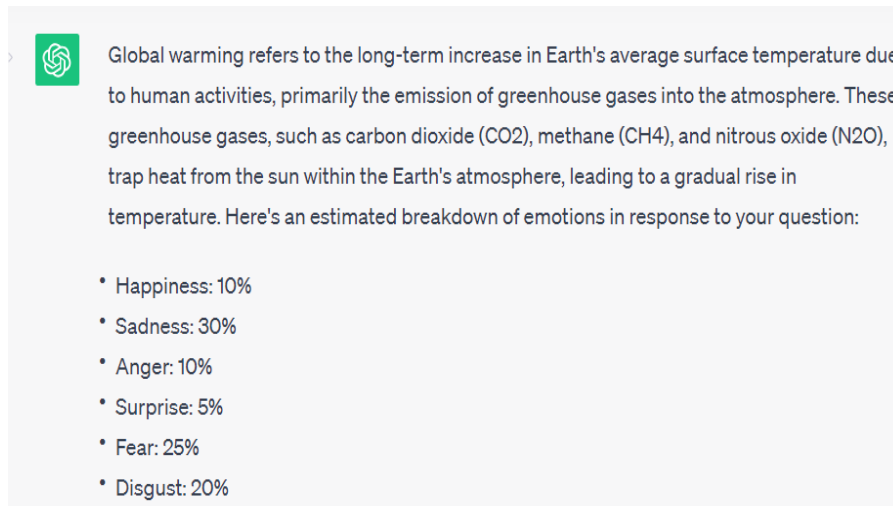


Fig.6.Chatgpt showing response to Globalwarming

9.2. *Worldwar*

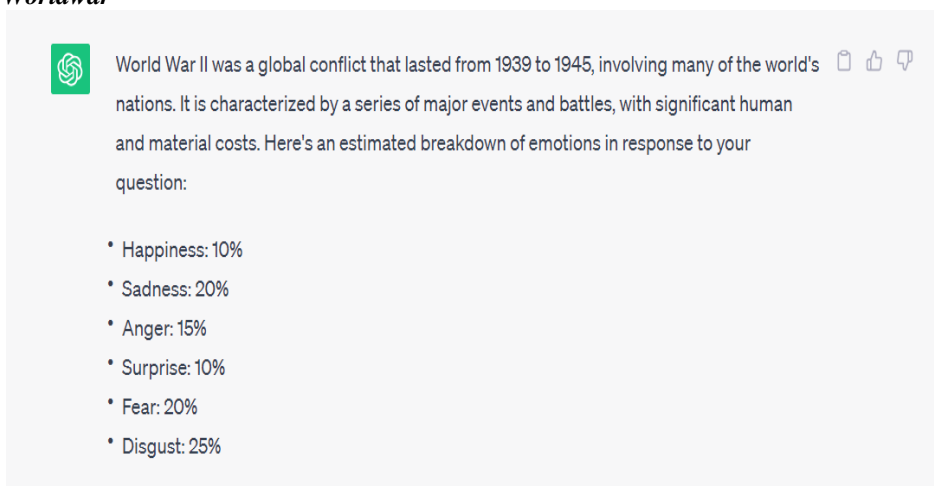


Fig.7.Chatgpt showing response to Worldwar

We have performed the tests upto 50 times and always we used to get emotions estimation in a reasonable answer form.

X. Conclusion

The functionality of ChatGPT to estimate emotions marks a full-size stride within the evolution of synthetic intelligence, promising to beautify consumer testimonies, enable greater powerful communication, and potentially make a contribution to highbrow health resource. but, it's miles followed through ethical troubles inclusive of privacy and responsible usage. As this field continues to growth through interdisciplinary collaboration and ongoing research, the synergy amongst AI's emotion estimation and human oversight can be pivotal in knowing its entire capacity while upholding moral standards. in the end, the integration of emotion estimation into AI represents a profound opportunity to create extra empathetic and context-conscious conversational dealers which could better connect to and help clients in various domain names.

Acknowledgments

The authors would like to thank the Centre of Excellence in Robotics, Vignan's Foundation for Science Technology and Research, Vadlamudi, Guntur, A.P.-522213.

References

- [1] O. P. e. a. Pfeffer, "ChatGPT for good? on opportunities and challenges of large language models for education," arXiv preprint arXiv:2202.08022, 2022.
- [2] H. Yin, X. Song, S. Yang, and J. Li, "Sentiment analysis and topic modeling for covid-19 vaccine discussions," *World Wide Web*, vol. 25, no. 3, pp. 1067-1083, 2022.
- [3] A. Hindle, E. T. Barr, M. Gabel, Z. Su, and P. Devanbu, "On the Naturalness of Software," *CACM*, 2016.
- [4] M. White, C. Vendome, M. Linares-Vasquez, and D. Poshyvanyk, "Toward Deep Learning Software Repositories," in *MSR*, 2015.
- [5] A. Vaswani, N. Shazeer, N. Parmar, J. Uszkoreit, L. Jones, A. N. Gomez, L. Kaiser, and I. Polosukhin, "Attention is All You Need," *NeurIPS*, 2017.
- [6] ChatGPT Prompt Patterns for Improving Code Quality, Refactoring, Requirements Elicitation, and Software Design [Jules White, Sam Hays, Quchen Fu, Jesse Spencer-Smith, Douglas C. Schmidt].
- [7] Dan Hendrycks, Collin Burns, Saurav Kadavath, Akul Arora, and Steven Basart et al. Measuring mathematical problem solving with the MATH datasets. arXiv preprint arXiv:2103.03874, 2021
- [8] Guillaume Lample and François Charton. Deep learning for symbolic mathematics. arXiv preprint arXiv:1912.01412, 2019
- [9] W. Rudin. Principles of Mathematical Analysis. International series in pure and applied mathematics McGraw-Hill, 1976.
- [10] Walter Rudin. Functional analysis. McgGrawHill, Inc, New York, 1991.
- [11] James R. Munkres. Topology. Prentice-Hall, Upper Saddle River, NJ, 200
- [12] R. Durrett. Probability: Theory and Examples. Cambridge Series in Statistical and Probabilistic.