

Compulsory Task 2

- Read up on any innovative technology using NLP (by companies such as Google or IBM, for instance) and write a brief summary about the technology, what it achieves/does, and an overview of how it works (250 - 500 words).

To take an example, you may have noticed Gmail's auto-response suggestions on your incoming emails. If I send an email to your Gmail address asking for an appointment, on opening the mail you would notice Gmail's automatically suggested response options such as "Yes, that works for me" and "Sorry, I'm not available at that time."

- Save your answer in a file called **nlp_2.pdf**.

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The rapid emergence of generative artificial intelligence tools has caused a stir among people. There's a lot of excitement surrounding the potential of these tools, but there's also some concern about what they might mean for the future.

ChatGPT uses advanced language models to generate impressively human-like text. It accomplishes this through the use of Reinforcement Learning with Human Feedback, which helps to create a familiar dialogue-based interface that facilitates good interaction and dialogue.

But, ChatGPT factual accuracy, for instance, is not the primary objective due to its limited offline database. So while the chatbot can engage in a coherent conversation, it may provide incorrect answers, highlighting the need for caution and critical evaluation when relying on its responses.

Natural Language Processing (NLP) lies at the heart of enabling computers to understand and interpret human language. The development of models like GPT-3 has pushed the boundaries of NLP with their ability to adapt to new tasks and generate responses that closely resemble human language.

Google's LaMDA, later, has introduced Bard, an experimental AI service conversational technology. Opinions on these AI-powered conversational systems remain divided, with critics raising pertinent questions about their impact on creativity and education.

As these advancements in conversational AI unfold, it is important to address the ethical considerations that accompany them. Concerns about academic integrity, responsible usage of technology, and the potential impact on existing job roles have been at the front of discussions. While universities have conducted trials with these tools, concerns about plagiarism and factual errors in automated content production have also come to light, necessitating the establishment of guidelines and frameworks to navigate these challenges.

AI models like ChatGPT operate by predicting words based on the input provided, calculating the probability of word relationships within the text to generate a response. It is crucial to note that these models do not engage in genuine thinking but rather utilize statistical patterns to generate the most likely words. Some experts argue that these tools can be valuable in overcoming creative blocks, providing a creative push or stimulation to professionals and artists facing "blank page syndrome." The intention is that once inspired, individuals would continue their work with their own expertise and hands-on approach.

Source

<https://openai.com/>

<https://www.nytimes.com/2023/02/03/technology/chatgpt-openai-artificial-intelligence.html>

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<https://writings.stephenwolfram.com/2023/02/what-is-chatgpt-doing-and-why-does-it-work/>