# ChatGPT – The AI Chatbot

## Why in news?

Artificial Intelligence (AI) research company OpenAI's prototype dialogue-based AI chatbot "ChatGPT" has crossed more than a million users in less than a week.

## What is ChatGPT?

- **ChatGPT** - ChatGPT is a large language model developed by OpenAI that can be used for natural language processing tasks such as text generation and language translation.
- It is based on GPT-3.5 (Generative Pretrained Transformer 3.5) model and uses deep learning algorithms to generate text responses to prompts.
- ChatGPT uses natural language processing technology to understand and generate responses to questions and statements that it receives.
- **Applications** – The ChatGPT can
    - Write jokes and essay
    - Guess at medical diagnoses
    - Create text-based games
    - Explain scientific concepts at multiple levels of difficulty
    - Translate messages in real time,
    - Automate customer service and delivery
- It cannot independently write and run code, but can aid in the code production by outlining specific programming principles.

## What are the key features of ChatGPT?

- **Large size** - ChatGPT has been trained on a massive corpus of text data so that it can generate highly accurate and fluent responses.
- **Memory** - The bot can remember earlier comments in a conversation and recount them to the user.
- **Human-like responses -** ChatGPT is able to generate responses that are highly relevant to the prompt and that exhibit a level of knowledge and understanding that is similar to that of a human.
- **Versatility** - ChatGPT is able to adapt to different situations and contexts and is a versatile tool that can be used for a wide range of natural language processing tasks.
- **Ability to handle long-range dependencies in the input text** – The self-attention mechanisms in the GPT-3 architecture allow the model to capture the long-range dependencies and generate accurate and fluent responses.
- **Declining inappropriate requests** - ChatGPT has been trained to decline 'inappropriate' requests, presumably those which are 'illegal' in nature.
- **Clarity** - ChatGPT has surpassed Google in the clarity and practicality of some

question and answer results.

## What are the concerns with ChatGPT?

- **Dependence on data** – Since ChatGPT has been trained on a large corpus of text data, the accuracy of the model's responses will depend on the quality and diversity of the data that it has been trained on.
- **Crediblity -** Even artificial intelligence can make some mistakes due to resource or technical limitations.
- **Limited understanding** - Unlike Google, ChatGPT doesn't crawl the web for information on current events, and its knowledge is restricted to things it learned before 2021, making some of its answers feel stale.
- **Job loss** - Some believe that it would be the beginning of the end of all white-collar knowledge work, and a precursor to mass unemployment.
- **Biases** - There are also concerns regarding biases (racist and sexist outputs) within the bot's responses—issues that have plagued models before it, such as Microsoft's Tay chatbot and Meta's Galactica.
- **Privacy** – There are also concerns over privacy and safety.
- **Effect on creativity** - Many feel that the use of ChatGPT by students for their assignments and examinations will hinder their creative and learning abilities.
- It is crucial to remember that artificial intelligence will be a tool, not a substitute for human developers.

### References


1. The Indian Express | OpenAI's ChatGPT
2. The Indian Express | The brilliance and weirdness of ChatGPT
3. The Indian Express | What is ChatGPT?
4. ChatGPT Pro | ChatGPT


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