

DOCUMENT A

Difficulty: *

It's been fascinating to watch the Twittersphere try to make sense of ChatGPT, a new cutting-edge A.I. chatbot that was opened for testing last week.

5 ChatGPT is, quite simply, the best artificial intelligence chatbot ever released to the general public. It was built by OpenAI, the San Francisco A.I. company that is also responsible for tools like GPT-3 and DALL-E 2, the breakthrough image generator that came out this year.

10 For most of the past decade, A.I. chatbots have been terrible — impressive only if you cherry-pick the bot's best responses and throw out the rest. In recent years, a few A.I. tools have gotten good at doing narrow and well-defined tasks, like writing marketing copy, but they still tend to flail when taken outside their comfort zones.

15 But ChatGPT feels different. Smarter. Weirder. More flexible. It can write jokes (some of which are actually funny), working computer code and college-level essays. It can also guess at medical diagnoses, create text-based Harry Potter games and explain scientific concepts at multiple levels of difficulty. [...]

20 But users have also been finding more serious applications. For example, ChatGPT appears to be good at helping programmers spot and fix errors in their code. It also appears to be ominously good at answering the types of open-ended analytical questions that frequently appear on school assignments. (Many educators have predicted that ChatGPT, and tools like it, will spell the end of homework and take-home exams.)

Most A.I. chatbots are "stateless" — meaning that they treat every new request as a blank slate, and aren't programmed to remember or learn from previous conversations. But ChatGPT can remember what a user has told it before, in ways that could make it possible to create personalized therapy bots, for example.

25 ChatGPT isn't perfect, by any means. The way it generates responses makes it prone to giving wrong answers, even on seemingly simple math problems.

30 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. [...] Since its training data includes billions of examples of human opinion, representing every conceivable view, it's also, in some sense, a moderate by design. Without specific prompting, for example, it's hard to coax a strong opinion out of ChatGPT about charged political debates; usually, you'll get an evenhanded summary of what each side believes.

"The Brilliance and Weirdness of ChatGPT,"

by Kevin Roose, *The New York Times*, December 5th, 2022

> Identify the applications of ChatGPT related by the author.

> List the upsides and downsides of this AI according to the author + Add your own

DOCUMENT B

Difficulty: **

A scientific discipline, AI officially began in 1956, during a summer workshop organized by four American researchers – John McCarthy, Marvin Minsky, Nathaniel Rochester and Claude

Shannon – at Dartmouth College in New Hampshire. Since then, the term “artificial intelligence”, probably first coined to create a striking impact, has become so popular that today everyone has heard of it.

However, the success of the term AI is sometimes based on a misunderstanding, when it is used to refer to an artificial entity endowed with intelligence and which, as a result, would compete with human beings. This idea, which refers to ancient myths and legends, like that of the golem [from Jewish folklore, an image endowed with life], have recently been revived by contemporary personalities including the British physicist Stephen Hawking (1942-2018) [and] American entrepreneur Elon Musk [...].

For McCarthy, Minsky, and the other researchers, AI [...] was based on the conjecture that all cognitive functions – especially learning, reasoning, computation, perception, memorization, and even scientific discovery or artistic creativity – can be described with such precision that it would be possible to programme a computer to reproduce them. In the more than sixty years that AI has existed, there has been nothing to disprove or irrefutably prove this conjecture, which remains both open and full of potential. [...]

Many achievements using AI techniques surpass human capabilities [...]. Today, AI applications affect almost all fields of activity – particularly in the industry, banking, insurance, health and defence sectors. Several routine tasks are now automated, transforming many trades and eventually eliminating some.

With AI, most dimensions of intelligence – except perhaps humour – are subject to rational analysis and reconstruction, using computers. Moreover, machines are exceeding our cognitive faculties in most fields, raising fears of ethical risks.

However [...] contrary to what some people claim, machines pose no existential threat to humanity. Their autonomy is purely technological, in that it corresponds only to material chains of causality that go from the taking of information to decision-making. On the other hand, machines have no moral autonomy, because even if they do confuse and mislead us in the process of making decisions, they do not have a will of their own and remain subjugated to the objectives that we have assigned to them.

“Artificial Intelligence: Between Myth and Reality,”
by Jean-Gabriel Ganascia, *unesco.org*, June 25th, 2018

> Identify and make sense of the author's definition of AI. To what extent does it contradict or qualify the common meaning and implications associated with “artificial intelligence”?

> Identify the myth(s) associated with AI according to the author. What is his opinion about it/them?

DOCUMENT C Difficulty: ***

Prevalent AI narratives share dominant characteristics: a focus on embodiment; a tendency towards utopian or dystopian extremes; and a lack of diversity in creators, protagonists, and types of AI.

Narratives are essential to the development of science and people’s engagement with new knowledge and new applications. Both fictional and non-fictional narratives have real world effects. Recent historical examples of the evolution of disruptive technologies and public

debates with a strong science component (such as genetic modification, nuclear energy and climate change) offer lessons for the ways in which narratives might influence the development and adoption of AI technologies.

10 AI narratives can be very helpful; for example, in inspiring those who work in the relevant disciplines and civil, public and private sectors; and in surfacing alternative futures and enabling debates about them. But they can also create false expectations and perceptions that are hard to overturn. [...]

15 Exaggerated expectations and fears about AI, together with an over-emphasis on humanoid representations, can affect public confidence and perceptions. They may contribute to misinformed debate, with potentially significant consequences for AI research, funding, regulation and reception.

[...] Public knowledge about the specifics of the science and technology is limited. Their perceptions and expectations are therefore usually informed by their personal experiences
20 of existing applications and by the prevalent narratives about the future.

Both fictional and many non-fictional narratives focus on issues that form either a very small subset of contemporary AI research, or that are decades if not centuries away from becoming a technological reality. This disconnect between the narratives and the reality of the technology can have several major negative consequences.

25 The prevalence of narratives focused on utopian extremes can create expectations that the technology is not (yet) able to fulfill. This in turn can contribute to a hype bubble[...]. If such a bubble bursts because the technology was unable to live up to the unrealistic expectations, public confidence in the technology and its advocates could be damaged.

30 By contrast, false fears may misdirect public debate. For instance, an over-emphasis on implausible AI and humanoid robotics could overshadow issues that are already creating challenges today.

"Portrayals And Perceptions of AI And Why They Matter,"
The Royal Society, 2018

> Identify the positive and negative impacts of narratives on the development of AI according to the authors.