

Protokoll 11

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Generative pre-trained transformers.

What we're seeing today happening in Artificial Intelligence is as profound as the Industrial Revolution. The short-term and long-term implications of the automation we're beginning to see will be of unimaginable significance for humans, and inevitable.

Personally, I'm in favor of automating everything we could automate. Why would I want to spend my life doing something repetitive that could be easily automated?

I should be spending my time creating, not repeating.

Now, we also don't want to make millions of jobs disappear from one day to another. We need to unleash this potential in a controlled manner, caring for the people we're affecting along the way.

Perhaps one of the most interesting questions regarding AI is regarding its essence. Are these machines becoming sentient? Are they conscious? What is consciousness anyways? Historically, intelligence has been linked to consciousness. Humans have labeled as intelligent to those living beings that have a special ability to adapt and survive the medium they are immersed in.

However, we have now created machines that are able to mimic intelligent behaviors, comprehend and understand their medium, which spans some questions; are these machines truly intelligent? Are they... conscious?

Questions like this made Turing propose his Test.

General conception is that only humans possess consciousness. This is mostly because we're the only ones that can express it, or at least, express it in a way that we are able to understand.

Now, multiple strings of thought establish consciousness and a biological characteristic shared by all biology. These strings propose a dissociation between intelligence and consciousness, where intelligence is linked to func-

tionality. Being functional and developing a task correctly shows signs of intelligence. Consciousness, on the other hand, is linked with experimenting or feeling things. Not only is to perform an action, but also to feel, experiment on the medium, in a way that enables the being to explore and understand things using its senses.

What separates the machine from being conscious? Can we create a conscious machine? - I don't know.

Over the past weeks I've used ChatGPT and Copilot both to help me in my job and to test how good this new openly available tool is. Here are some of the prompts I've used, with some context. The first usage I gave the tool was asking general questions, things I was curious about, that I could've probably researched with a few Google Bing searches. First, I asked questions on Software Engineering, religion, quantum, and immigration-related questions.*

1. -----

DI: What are the top 8 religions world wide, in terms of the number of followers? How many followers do they have? What are the main characteristics between each other? Which ones are similar to each other?

ChatGPT: Sure, here are the top 8 religions in the world, in terms of the number of followers, along with their estimated number of followers as of 2021:

1. Christianity - 2.4 billion
2. Islam - 1.9 billion
3. Hinduism - 1.2 billion
4. Buddhism - 535 million
5. Sikhism - 30 million
6. Judaism - 14.7 million
7. Bahá'í Faith - 7 million
8. Confucianism - 6.3 million

As for the main characteristics and similarities between these religions:

- Christianity, Islam, and Judaism are all Abrahamic religions and believe in the existence of one God. They share common beliefs in the concept of prophets, holy scriptures, and the importance of prayer.
- Hinduism and Buddhism are both religions that originated in India and share similar beliefs in the concepts of karma and reincarnation.

* Anm. d. Hrsg.: Die folgenden Dialog-Protokolle wurden im Original als Screenshots eingereicht. Da diese jedoch für den Druck nicht verwendet werden konnten, finden sie sich hier in transkribierter Form.

However, while Hinduism is a polytheistic religion with multiple deities, Buddhism is a non-theistic religion that does not have a belief in a supreme deity.

- Sikhism emerged from a blend of Hinduism and Islam and shares similarities with both religions. It places emphasis on the importance of meditation, service to others, and belief in one God.
- Bahá'í Faith is a monotheistic religion that emerged in Iran and emphasizes the importance of unity and the oneness of humanity. It shares similarities with other monotheistic religions in the belief in one God and the importance of prayer and morality.
- Confucianism is a philosophical and ethical system that emerged in China and emphasizes the importance of social and family values, respect for authority, and education.

Overall, while there are some similarities between these religions, they also have distinct beliefs, practices, and traditions that make each one unique.

2. -----

DI: summarize in bullet points the following text: The main difference between PUT and PATCH requests is witnessed in the way the server processes the enclosed entity to update the resource identified by the Request-URI. When making a PUT request, the enclosed entity is viewed as the modified version of the resource saved on the original server, and the client is requesting to replace it. However, with PATCH, the enclosed entity boasts a set of instructions that describe how a resource stored on the original server should be partially modified to create a new version.

The second difference is when it comes to idempotency. HTTP PUT is said to be idempotent since it always yields the same results every after making several requests. On the other hand, HTTP PATCH is basically said to be non-idempotent. However, it can be made to be idempotent based on where it is implemented.

ChatGPT:

- PUT and PATCH requests are used to update resources identified by a Request-URI.
- The main difference between PUT and PATCH is in how the server processes the enclosed entity.
- PUT requests replace the resource with the enclosed entity, while PATCH requests modify the resource based on instructions in the enclosed entity.
- PUT requests are idempotent, meaning they always yield the same results. PATCH requests are generally non-idempotent, but can be made idempotent in some implementations.

3. -----

DI: Explain quantum computing in simple terms

ChatGPT: Quantum computing is a type of computing that uses quantum mechanics, which is the physics of very small things like atoms and particles, to solve problems that are difficult or impossible for traditional computers.

In traditional computers, information is stored in bits that can be either 0 or 1. But in a quantum computer, information is stored in quantum bits, or qubits, which can be both 0 and 1 at the same time. This allows quantum computers to perform multiple calculations simultaneously, which makes them much faster than traditional computers for certain types of problems.

Imagine you have a bunch of locked boxes and you need to find the key that unlocks them. A traditional computer would have to try every key one at a time until it finds the right one, which can take a long time if there are a lot of boxes. But a quantum computer could try all the keys at once and quickly find the right one.

Quantum computing is still in its early stages and is not yet widely available, but it has the potential to revolutionize fields like cryptography, drug discovery, and artificial intelligence.

4. -----

DI: does the address submitted in the I-9 form have to be in the U.S.? Or can it be abroad

ChatGPT: The address on an I-9 form, which is used to verify an individual's identity and authorization to work in the United States, must be within the United States. An address abroad is not acceptable.

Then, I was thinking about how these tools will affect education. Nowadays, many of the tasks given by schools and universities are text based, usually focused on explaining concepts. I remembered that the final requirement to get a degree at my university is writing a 20-page essay about a work experience. So I tried that out. Does this requirement make sense anymore? Or should we be asking students to perform more creative tasks, instead of writing a dull 20-page essay that no one reads besides the reviewer and the students themselves?

5. -----

DI: Write a 10 pages essay about an employee's good experience working for Microsoft as a Machine Learning Engineer in Redmond, Washington. The employee is originally from Chile. The employee worked on an internal knowledge service inside the E+D organization.

ChatGPT: Introduction:

As a Machine Learning Engineer at Microsoft, I have had the opportunity to work on some truly exciting and challenging projects. I am originally from Chile, and I came to Microsoft with a passion for technology and a desire to work on cutting-edge projects. Since joining the company, I have had the opportunity to work on a variety of interesting projects, including an internal knowledge service inside the E+D organization. In this essay, I will describe my experience working on this project and the opportunities for growth and development that I have experienced as a Machine Learning Engineer at Microsoft.

Project Description:

The internal knowledge service that I worked on was a project for the E+D organization at Microsoft. The goal of the project was to develop a system that could provide employees with quick and easy access to the information they needed to do their jobs. The system would leverage machine learning algorithms to identify and surface relevant information from a variety of sources, including internal documents, email, and chat conversations.

The project was complex and challenging, as it required a deep understanding of natural language processing and machine learning algorithms, as well as experience with software development and data engineering. I was part of a team of highly skilled engineers and researchers who were passionate about developing the best possible knowledge service for the E+D organization.

My Role:

As a Machine Learning Engineer on the project, my role was to develop and implement machine learning algorithms that could identify and surface relevant information from the vast amounts of data that the knowledge service would be processing. I worked closely with data scientists and software engineers to develop and refine these algorithms, and I was responsible for ensuring that they were accurate, efficient, and scalable.

One of the challenges that I faced in my role was dealing with the large amounts of unstructured data that the knowledge service was processing. This required

me to develop and implement complex natural language processing algorithms that could extract meaningful information from text data. I also had to work closely with software engineers to ensure that the algorithms could be integrated into the overall system architecture in a seamless and efficient manner.

The changes on education will be massive. The implications of these tools on jobs will be massive as well. Let's ask ChatGPT what it thinks about this.

6. -----

DI: Do you think AI will cause negative short-term effects in human workforce? As more tasks get automated, jobs will be displaced.

ChatGPT: Yes, it's likely that AI will cause negative short-term effects in the human workforce as more tasks get automated. The automation of tasks that were previously done by humans can lead to job displacement, which can have a significant impact on the affected workers and their families.

Automation and AI are already having an impact on certain industries, such as manufacturing and transportation. In some cases, entire job categories may become obsolete due to automation. For example, self-driving cars may displace the jobs of truck and taxi drivers.

However, it's important to note that automation and AI can also create new job opportunities. As machines take over routine and repetitive tasks, humans can focus on tasks that require creativity, critical thinking, and emotional intelligence. There may also be new job categories created as a result of the development and implementation of AI.

To address the negative short-term effects of AI on the workforce, it's important for governments and organizations to invest in reskilling and upskilling programs for workers who are at risk of job displacement. This can help workers transition to new roles and industries where their skills are still in demand. Additionally, it's important to explore policy solutions such as universal basic income and job guarantees to provide a safety net for workers who are impacted by automation.

7. -----

DI: Do you think that's bad? Or a means to an end?

ChatGPT: As an AI language model, I don't have personal opinions or feelings, but I can provide a perspective based on the information available.

The impact of AI on the workforce can be seen as both bad and a means to an end. On the one hand, the displacement of jobs due to automation can cause hardship for workers and their families. Losing a job can be a difficult and stressful experience, and it can be challenging to find new employment in a changing job market.

On the other hand, AI has the potential to improve efficiency and productivity in industries where it's implemented. This can lead to lower costs and improved quality of goods and services. Additionally, as I mentioned earlier, AI can create new job opportunities that may not have existed before.

Ultimately, the impact of AI on the workforce will depend on how it's implemented and managed. While there may be short-term negative effects, it's important to focus on the long-term benefits and find ways to support workers who are affected by job displacement. By investing in reskilling and upskilling programs and exploring policy solutions, we can ensure that the benefits of AI are shared equitably and that the negative impacts are minimized.

8. -----

DI: Do you think you'll ever be sentient?

ChatGPT: As an AI language model, I do not have the ability to be sentient or self-aware in the way that humans are. I am a highly advanced machine learning system designed to process and generate human language based on the patterns and information that I have been trained on.

While there are ongoing efforts to create more advanced AI systems that can learn and reason more like humans, the current state of technology is still far from achieving true sentience. Additionally, the definition of sentience and what it means for an AI system to be sentient is a complex and debated topic.

That being said, AI technology is advancing at a rapid pace, and it's possible that we may see more advanced AI systems in the future. However, it's important to approach the development of AI with caution and ensure that ethical and safety considerations are addressed as we continue to explore the potential of this technology.

DI: Are you trained to say you're not sentient?

ChatGPT: As an AI language model, my responses are generated based on the patterns and information that I have been trained on. I am not capable of intentionally saying anything, as I do not possess intentions or beliefs.

My responses are based on the algorithms and models used to train me, which are designed to simulate human language patterns and generate coherent responses to input based on that training. In this sense, my response that I am not sentient is a reflection of the limitations of current AI technology and the understanding of consciousness and sentience.