

- *The difference between AI and General AI*

Narrow AI is what we encounter daily today. General AI is the next phase, in this phase, machines can think like humans and not be programmed by humans (Marr, 2022).

The artificial intelligence (AI) that we see today is what we refer to as narrow AI and is the only artificial intelligence that exists today. The reason why it's called narrow AI is that it has limited functionality. The AI algorithms don't have full cognitive capacities like the human brain; they are only designed to complete specific jobs. Narrow AI serves as an example of how intelligent behaviour is modellable. Siri and Alexa are a few examples of Narrow AI (Marr, 2022).

General AI, at this point, is only theoretical. It occurs when computers achieve levels of consciousness and decision-making equal to or greater than those of humans. General AI will enable machines to think and do tasks without the need for human programming (Marr, 2022).

General AI will also enable machines to display emotions and self-awareness. In the end, general AI aims to create a machine with full human intelligence (Marr, 2022).

It's a good idea to consider the capabilities of the technology while trying to differentiate between different kinds of artificial intelligence. Simply put, if a technology excels at only a few key tasks, it is narrow AI. If it functions like a human and isn't constrained to completing a single task, then it is considered to be General AI (Marr, 2022).

- *Discuss whether Bitcoin is Turing Complete*

Is Bitcoin “Turing Complete”? First, let's look at what it means that something is Turing complete.

Theoretically, any problem could one day be solved by a machine, according to Alan Turing. The Turing Machine is what this became known as. When a machine or programming language can simulate a Turing Machine by executing any program or resolving any problem the Turing Machine could, such a system or language is said to be Turing complete (Binance, 2022).

So, is Bitcoin “Turing Complete? Well, Dr. Craig S. Wright has written papers saying it is. Dr. Wright elaborates by saying that any Bitcoin transaction's outputs can be used as inputs for the one after it. The Bitcoin script may compute anything and produce a proven state, whose signature can be transferred to the next block and used for other purposes (at least as it exists in BSV). Even though a portion of the computation must be finished inside the block confirmation time, the outcome is already ready for the following portion (Southurst, 2020).

Bitcoin Core primarily criticises Dr. Wright's assertion that Bitcoin is Turing-complete because of the introduction of constraints that were initially imposed on Bitcoin only briefly and that have since been implemented in more cunning ways within BTC. While Dr. Wright predicted that Bitcoin would eventually reach data centers, they wanted to develop a different, more constrained approach (Wright, 2021). Another article states that Bitcoin is not considered to be Turing Complete. The reasoning behind this statement is that the bitcoin script currently does not enable loops (Farhan Aly, 2021). So whether Bitcoin is Turing complete or not is not yet something people cannot agree on.

- *Discuss what role blockchain might play working with AI in the future*

Since blockchain generates large data, which in turn supports artificial intelligence, the future of blockchain and AI are mutually dependent (Pandya, 2019).

AI and Blockchain technology are often cited together. Blockchain offers a solid framework for widespread, secure data access and storage. Blockchains, an open-source and flexible AI, maybe the greatest option for handling data security and storage. The said data's collection and processing provide significant logistical and legal challenges as well. This is the main cause of the open-source AIs' extreme crudeness and the need for laborious training for every use case (The Financial, 2022).

Blockchain and artificial intelligence (AI) are transversal technologies that have the potential to upend a variety of industries. These technologies will also likely be crucial to the success of Europe's digital and green transitions as well as to the expansion of its technical sovereignty (Vogel, 2022).

Blockchain and AIs operate very differently from one another. While AIs process and record patterns in the data, blockchains store data in a way that is tamper-proof. If employed properly, these functions can be quite complementary, but if not, they risk utterly destroying the system (The Financial, 2022). Each of us will be affected and influenced by decentralised intelligence. As we can see, today's problems are tomorrow's solutions. Nothing can stop the incredible advancements being made by the potential of neuromorphic computing processors to increase the security of blockchain and AI (Pandya, 2019).

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