3.1

Artificial intelligence (AI) is a term that refers to the emulation of human intellect by computers that have been designed to think and act like humans. The word may also be used to describe any machine that can learn and solve problems.

The greatest feature of artificial intelligence is its capacity to reason and adopt choices that maximise the chances of success. Machine learning is a subset of artificial intelligence that refers to computer systems autonomously learning from and adapting to new data without human assistance. By absorbing large quantities of unstructured data such as text, pictures, or video

Artificial intelligence (AI) defines any intelligence that is shown by a computer, robot, or other machine. Artificial intelligence refers to when a computer or machine learns by studying various examples and experiencing new things, eventually acquiring the capabilities of the human mind, such as recognising objects, understanding, and responding to different languages, as well as making decisions, solving problems, and combining these abilities to perform various functions that the human brain may, such as greeting a hotel guest or driving a car (IBM Cloud Education, June 2020).

3.2

AI Agents are entities that use many data points, such as sensors, I/O data, databases, ontologies, etc., to determine the overall success of different systems. An actuator's primary function is mentioned as being in this description. AIA consists of four architectures. They are reactive agents (decisions are made by way of direct mapping from a given situation to an action), belief–desire–intention agents (decisions depend on data structures that are layered), and logical inference-based agents (actions are derived by using logical inference) (decision is realised via various software layers, each depended on its environment at different levels of abstraction). Also, there are five different AIA classifications to take into consideration. Model-based reflex agents, goal-based agents, utility-based agents, and learning agents are all models of the Simple reflex.

Blockchains may be of assistance in two distinct ways. The first thing to know about a blockchain is that it can store programmes. AIA on the blockchain also aids programmers in many ways, including translation of code from one language to another, the ability to search for algorithms that meet certain criteria, and the ability to check specifications and documentation before beginning the coding process. This AIA presents a dependable, safe, and revolutionary solution, using deep learning methods and massive data mining from current code repositories.

3.3

John Horton Conway, a British mathematician, created the Game of Life in 1970. A. Conway's Game of Life It's a two-dimensional grid of square cells that may be living or dead. Each cell interacts with its eight horizontal, vertical, and diagonal neighbours. • Any living cell with less than two living neighbours dies, as though due to under-population.

In the following generation, any cell with two or three neighbours survives.

• Any living cell with more than three neighbours dies.

In other words, a dead cell with three living neighbours becomes a live cell.

This concept is currently utilised in bitcoin adoption. Imagine a cell with an outer thin layer representing fiat currency users who need KYC verification and an interior thick layer representing bitcoin users who do not. The core area of bitcoin users will expand over time, eventually absorbing all fiat currency users. People will eventually not require KYC authentication as their money moves freely in the market like Bitcoin. As a result, KYC verification will become obsolete as more individuals choose for bitcoin. Ultimately, this demonstrates that Bitcoin is not a danger and will become a worldwide consensus (Beautyon, 2015).

3.4

The concept of a Turing-complete computer, which can calculate every computable number, was first presented in 1936. Dr. Craig Wright, who believes that the word computable is misleading, explained his stance that it may imply both infinite and unbounded numbers and thus there is no instance of infinite numbers. So, in his view, a computer might be defined as Turing complete if it could do anything. Any problem may be solved using a bitcoin script, which generates a block that solves the problem. In other words, the signature is meant to be used elsewhere, and may be passed on to the following block. Even if the calculation has to be completed inside the block confirmation time, the results are available when the next step of the computation begins. Since every transaction published now or in the past will remain legitimate in the future, this statement is saying that transactions can always be verified and proven genuine.

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