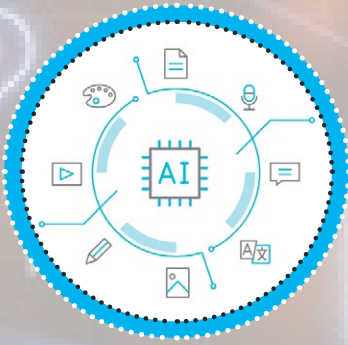


All About Artificial Intelligence (AI)



Artificial intelligence is commonly known as AI. It is a technology that is used by people across the world every day in various forms, including streaming services and chatbots.

What Is AI?

AI is a computer, robot or machine's ability to learn. AI uses the information and instructions it is given to solve problems and make predictions.



The History of AI

In 1948, British mathematician Alan Turing wrote about his idea of an intelligent machine that could use its unlimited memory and given information to follow instructions and learn.

After a few years, computers and technology had improved enough that Christopher Strachey was able to write one of the first AI programs in 1951. In 1956, Allen Newell, John Clifford Shaw and Herbert Simon wrote Logic Theorist, viewed by some experts as the first program to have human-like intelligence.

Over the years, our knowledge of computers, AI and technology grew. In 1997, an AI computer named Deep Blue won a chess game against the reigning world chess champion, Gary Kasparov. In 2016, Hanson Robotics built Sophia, an advanced humanoid robot.

AI Today

Today, streaming TV services use AI to recommend shows to users based on what other viewers are watching. This includes services such as Netflix and YouTube. Virtual assistants use AI to answer questions and complete tasks. An example of this is the virtual assistant known as Alexa. Many smartphones use AI for face ID security and most modern cars have navigation software that uses AI technology.



Other uses of AI include smart home devices, such as thermostats and doorbells. AI is also used for adverts as it tailors to your online searches and search history. Search engines use AI to search for information and rank results in order of importance.

AI is also helping doctors to scan X-rays, perform operations and diagnose patients. In astronomy, scientists are using AI in telescopes to find new objects across our galaxy and beyond.



Advantages and Disadvantages of AI

AI technology doesn't tire, can work non-stop and is less likely to make mistakes. In addition, AI can often solve problems more quickly and can be designed to do it repeatedly without interruption. AI robots can perform tasks that would be dangerous for humans, such as ocean or space exploration.

However, there are some potential disadvantages to AI. Technology can break and malfunction and it can be expensive to develop and maintain. Additionally, AI only knows what it has previously been shown. Although AI has human-like intelligence, it cannot copy or understand human emotion.

How Is AI Evolving?

Most current AI is referred to as **narrow or weak AI**. In the future, advancements in **strong AI** will strive to make technology that can react to certain situations by using sensors to detect smells, taste, touch and sound.

AI is a fast-developing technology. It is appearing more frequently in our everyday lives so it is important to keep ourselves safe when we use it.



Glossary

narrow or weak AI: Machines or robots that can only perform the task they are programmed to do.

strong AI: Machines or robots that can understand and learn advanced tasks.

Questions

1. In what year did Alan Turing write about an intelligent machine? Tick one.

- ☐ 1948
- ☐ 1951
- ☐ 1956
- ☐ 1997

2. What kind of game did Deep Blue win? Tick one.

- ☐ draughts
- ☐ cards
- ☐ chess
- ☐ memory

3. What is another name for narrow AI?

4. Look at the section called **How Is AI Evolving?**

Find and copy one word that means the same as 'try very hard'.

5. Fill in the missing words.

In addition, AI can often solve problems more quickly and can be _____ to do it repeatedly without _____.

6. What is your favourite fact about AI? Explain your answer.

7. Why do you think people created AI programs in the first place? Explain your answer.

8. Think of something else that uses AI. How do you know? Explain your answer.
