

What are AI agents?

May 23, 2024 • vajiramandravi.com



About AI agents:

- These are sophisticated AI systems that can **engage in real-time, multi-modal** (text, image, or voice) interactions with humans.
- Unlike conventional language models, which solely work on text-based inputs and outputs, AI agents can **process and respond** to a wide variety of inputs including voice, images, and even input from their surroundings.
- These agents **perceive their environment via sensors**, then process the information using algorithms or AI models, and subsequently, take actions. Currently, they are used in fields such as gaming, robotics, virtual assistants, autonomous vehicles, etc.

How are they different from large language models?

- The **large language models (LLMs)** like GPT-3 and **GPT-4** have the ability to only generate human-like text, AI agents make **interactions more natural and immersive** with the help of voice, vision, and environmental sensors.
- Unlike LLMs, AI agents are designed for instantaneous, real-time conversations with responses much similar to humans.

- LLMs **lack contextual awareness**, while AI agents can understand and learn from the context of interactions, allowing them to provide more relevant and personalised responses.
 - Also, language models **do not have any autonomy** since they only generate text output. AI agents, however, can perform complex tasks autonomously such as coding, data analysis, etc. When integrated with robotic systems, AI agents can even perform physical actions.
 - **Potential Uses**
 - AI agents can serve as intelligent and highly capable assistants. They are capable of handling an array of tasks, from offering personalised recommendations to scheduling appointments.
 - These can be ideal for customer service as they can offer seamless natural interactions, and resolve queries instantly without actually the need for human interventions.
 - In the field of **education and training**, AI agents can act as personal tutors, customise themselves based on a student's learning styles, and may even offer a tailored set of instructions.
 - In healthcare, they could **assist medical** professionals by providing real-time analysis, diagnostic support, and even monitoring patients.
-

Q1: What is Robotics?

Robotics is an interdisciplinary sector of science and engineering dedicated to the design, construction and use of mechanical robots. Our guide will give you a concrete grasp of robotics, including different types of robots and how they're being applied across industries.

Source: What are AI agents, that power OpenAI's GPT4o and Google's Project Astra?

Source: <https://vajiramandravi.com/current-affairs/ai-agents/>

© Vajiram & Ravi. For personal use only.