

SIMA, Google Deepmind's New Al

Why In News

• **Google DeepMind** on revealed its latest AI gaming agent called SIMA or Scalable Instructable Multiworld Agent, which can follow natural language instructions to perform tasks across video game environments. Simply, Google's new AI is all set to play video games with you.



 SIMA points to a future of gaming where AI agents could play a key role. It also takes us a step closer to AI which can intelligently collaborate with humans not only in games but also in doing tasks in real-world environments.

What Is SIMA

- Al research lab Google Deepmind describes SIMA as an Al Agent, which is different from Al models such as **OpenAl's ChatGPT** or Google Gemini. Al models are trained on a vast data set and are limited when it comes to working on their own. On the other hand, an Al Agent can process data and take action themselves.
- SIMA can be called a generalist AI Agent that is capable of doing different kinds of tasks. It is like a virtual buddy who can understand and follow instructions in all sorts of virtual environments from exploring mysterious dungeons to building lavish castles. It can accomplish tasks or solve challenges assigned to it.
- It is essentially a **super-smart computer programme** that can be thought of as a digital explorer, having the ability to understand what you want and help create it in the virtual world.



- SIMA "understands" your commands as it has been trained to process human language. So when you ask it to build a castle or find the treasure chest, it understands exactly what these commands mean. One distinct feature of this AI Agent is that it is capable of learning and adapting.
- SIMA does this through the interactions it has with the user. The more you interact with SIMA, the smarter it gets by learning from its experiences and improves over time. This makes it better at understanding and fulfilling user requests.



- Based on the **current stage of AI development**, it is a big feat for an AI system to be able to play even one game. However, SIMA goes beyond that and can follow instructions in a variety of game settings.
- This could potentially introduce more helpful AI agents for other environments. The latest research from Google DeepMind shows that it is possible to translate the capabilities of advanced AI models into "useful, real-world actions through a language interface."



- With this, Google is hoping that **SIMA and other AI agents** will be able to use video games as sandboxes to understand how AI systems can be more helpful.
- According to the researchers, by learning from different gaming worlds SIMA comprehends how language ties in with game-play behaviour.
- "Our first approach was to record pairs of human players across the games in our portfolio, with one player watching and instructing the other. We also had players play freely, then rewatch what they did and record instructions that would have led to their game actions," read the official blog.