

LaMDA

The Language Model for Dialogue Application (LaMDA) is an AI-driven chatbot developed by Google.

Touted as the breakthrough in conversation technology, Google claimed that LaMDA would be capable of realistic, free-flowing and humane conversations with its users.

LaMDA came into the news when Google suspended its senior engineer Blake Lemoine, when he claimed that the AI which powered the chat box is sentient on June 14 2022. This sensational claim led to a series date regarding the possibility of sentient AI becoming a reality.

This article will further give details of Lamda within the context of the IAS Exam. It would be useful in the Science and Technology segment of the exam.

What is a Chatbox?

Before we go into detail about the implications of sentient LaMDA means in the realm of science and technology, one must understand what chatbots are to begin with.

Chatbots are virtual machines that act as advisors, consultants or assistants who talk to internet users in real-time. Usually, a human is behind the scenes controlling the chatbox but nowadays they need little to no human intervention. They come equipped with specialised algorithms that are tailored to enable conversations with users as per their requirements.

Although chatbox has many uses but for simplicity's sake, the following are the examples where they are primarily used:

- Content marketing – providing knowledge and information from various fields
- Customer service
- Notifications – personalized reminders
- Location of sites
- Purchase and ordering of products (e.g. food)
- Product consulting – recommendations based on preferences
- Competitions – Receipt of applications
- Entertainment

How does LaMDA work?

When an input is provided by a user, the set of algorithms present in LaMDA processes it into an output. What makes LaMDA different from other chatbox assistants like Alexa is the scale at which it operates.

Usually an AI will analyse an input command in small bits, looking for grammar or spelling errors, thus coming up with an adequate response. However, LaMDA is capable of processing large chunks of information through a network of computers which is taught to generate responses and in the process even sound like an actual human being.

LaMDA could instead reply with something like "*OK, it is pretty pretty bright out there isn't it?*" That just sounds more like you're talking to a person than a little box of circuits.

It does this by analyzing not just words, but entire blocks of language. With enough memory, it can hold the responses to multiple paragraphs worth of input and sort out which one to use and how to make the response seem friendly and human.

Is it possible that LaMDa is sentient?

Taking into account the inner workings of LaMDa described above, one can see why anyone can think that it is a sentient being. However it may not necessarily be the case. Given today's technology, it can be possible. As of now it can be said that LaMDA is merely behaving in a way that it was programmed to behave.

It is similar to how a traffic signal is programmed to change its colour at regular intervals. One can safely say that the LaMDA is an advanced version of a traffic signal but intricately designed to respond to human queries.

The debate around an AI being sentient is just the surface of the debate, the real issue is about AI being biased in its sentience, because in the end any artificial intelligence, no matter how advanced, needs a base programming for it to function. And programming is done by humans and they will naturally create it as per their experience and decision.

From where they evolve from that point on is a matter of another debate altogether, but the possible bias of AI programming is a serious concern. A computer might not be able to do bad things in the physical world, but it could convince people to do them.

LaMDA is incredible and the people who design systems like it are doing amazing work that will affect the future. But it's still just a computer even if it sounds like your friend after one too many 420 sessions and they start talking about life, the universe, and everything.

Frequently Asked Questions about LaMDA

What is Google's LaMDA?

LaMDA stands for Language Model for Developed Applications and it's basically an advanced form of a chatbot. In a blog post dated May 18, 2021, Google referred to it as "our breakthrough conversation technology"

What does it mean when AI is sentient?

The Google A.I. engineer made headlines this past week when he claimed one of the company's chatbots had become "sentient," which, if it were true, would be an earth-shattering achievement meaning the technology had become conscious or self-aware.

What is the test for sentience?

The Turing Test is a method of inquiry in artificial intelligence (AI) for determining whether or not a computer is capable of thinking like a human being. The test is named after Alan Turing, the founder of the Turing Test and an English computer scientist, cryptanalyst, mathematician and theoretical biologist.

