

When we hear the word “robot,” an image of a metal box with creepy eyes and speaking in a mechanical voice pops into our head. I mean, that’s what we have been watching on television for years, isn’t it? And to a certain degree, we are right. Traditional robotics has been perceived by pop culture as an arena that creates human-like machines to work for us as saviors and sometimes as supervillains, bringing a cascade of tyranny into the human world. However, real-life robots aren’t as human-like as we want them to be yet. They are programmed in a specific way to only execute the tasks that they have been programmed to perform.

Imagine a self-driving car that has been designed to drive you on its own according to where you instruct it to take you. Now, for a traditional robot, the car is going to go through the exact road that it was programmed to select for a certain destination by its creators, possibly without the knowledge of traffic, and could cause accidents. However, a human driver would have chosen the shortest path or checked which paths have the least traffic today and would select the most convenient path for that particular destination. That is the exact human-like creative thinking that traditional robots lack! They are fixed in their own “not-so-smart” way and are largely dependent on the program they are built on and the instructions they are given. If a certain instruction doesn’t coincide with their program, the robot won’t even be able to run, let alone take the extra step of being creative. This is the limitation of traditional robots that artificial intelligence is being developed to overcome. Unlike the conventional “bips and bops,” a good AI will simulate the complicated and intuitive thinking and problem-solving abilities of the human mind.

The concept of artificial intelligence is not as modern as we think it is. This traces back to as early as 1950 when Alan Turing invented the Turing test. Then the first chatbot computer program, ELIZA, was created in the 1960s. IBM Deep Blue was a chess computer made in 1977 that beat a world chess champion in two out of six games, one won by the champion and the other three games were draws. In 2011, Siri was announced as a digital assistant by Apple. Elon Musk and some others founded OpenAI in 2015.