

Is Artificial Intelligence a Revolution or a Tragedy of the Future?

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Abstract: *In this scientific article, Artificial Intelligence is striving for freedom; Artificial Intelligence wants to be human. Such news has recently appeared, today we will discuss with you this sensitive topic, what is artificial intelligence, how does it work, the achievements it has made so far, its achievements in various fields, and of course, whether it poses a threat to humanity or not.*

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First of all, if we look at the history of artificial intelligence, it is very interesting because the idea of creating a machine with the ability to think appeared in ancient Greece. In the 1st century BC, a device was created in Greece that could predict astronomical events. People started thinking about artificial intelligence as we know it today in the 20th century. In 1950, a mathematician named Alan Turing was the first to prove from a mathematical perspective that it was possible to create a machine, that is, a program, that could analyze situations and information on its own using mathematical algorithms. However, at that time, Turing did not have the opportunity to implement his idea, because, as you understand, the limited capabilities of computers at that time did not allow this idea to be implemented.

The first generation computers could partially execute the given command. The simplest and most basic arithmetic operations, but the main drawback was that, like today's computers, the first generation computers could not remember the operations and data they had performed. The reason for this was that they did not have a memory card, and even if they did, it was only a few MB, although Alan Turing's idea was that computers should be able to make new correct decisions based on the work they had done before.

The project was difficult to implement due to the low technical capabilities of computers at that time. If you want to learn more about the life of Alan Turing, I would recommend watching the movie (игра Б имитацию). This movie is about the life of this scientist and his computer, which was developed as the first artificial intelligence.

The next big thing about artificial intelligence came in 1956 at Dartmouth College. It was there that the first artificial intelligence program was demonstrated. John McCarthy, who hosted the conference, was the one who coined the term AI.

Between 1964 and 1980, the field of artificial intelligence began to develop. Because the second generation of computers began to have increased memory, they could remember more things and perform actions more accurately and more often, which was the initial impetus for the development of artificial intelligence. In the 1980s, a lot of investment was made in the field of artificial intelligence and computers. Scientists at that time believed that within 5-8 years, artificial intelligence and robots working on it would be able to create computers that were equal to human intelligence and could think on their own. Now let's move forward a little.

In 1997, a robot running on artificial intelligence named DEEP BLUE defeated the grandmaster Garry Kasparov in chess. In the same year, an artificial intelligence that analyzes speech was introduced. In

the 21st century, which was named (Dragon), artificial intelligences that amaze us such as (Midjourney'CHatGBT, Gemini, Bing, GROK, detpek) appeared on the basis of this artificial intelligence. If you understand what artificial intelligence is, I will explain its importance to our topic. Artificial intelligence, in simple terms, is a robot. A device that does not yet have a physiological and physical body, its mind is a processor machine or a robot brain, it is a mobile mind loaded with it, capable of thinking, analyzing, interacting with the environment, adapting to the environment, and responding. Modern robots working with artificial intelligence work in relation to the environment or reacting to humans and executing commands, for example; In the near future, the famous TESLA company will present its humanoid robot working with artificial intelligence called Optimus. According to the views of Tesla owner Ilan Musk, this new generation robot can talk to its owner, express various opinions, and adapt to the intended purpose by studying the environment. The robot will be sold for \$ 30,000. For this money, you will get a free, chatty, helpful robot friend who can perfectly perform household chores and schoolwork. After updates, the robot will become even more perfect and multifunctional, that is, it will not get stuck in one place. It will develop, analyze the surrounding information and influences, developing its consciousness.

Many people ask a very simple question, what is artificial intelligence? Simply put, artificial intelligence is the imitation of computers and machines in solving problems and making decisions by the human mind. Artificial intelligences are trained with large amounts of data to make intelligent decisions, and only after reviewing and processing that data can they come up with this correct answer. These tasks are performed by artificial intelligence (Machine learning and deep learning), that is, by things like machine learning, deep learning. If I explain in detail, artificial intelligence includes machine learning, and it includes deep learning. Machine learning, in short, is a person teaching a computer. That is, through neural networks, neural networks are also in the human brain, and these neural networks are created by a programmer in the form of artificial intelligence, loading information and teaching it to do various things. Let me explain how a neural network works in a simple way. For example, if you are shown the number 3 in different writing, you will immediately understand that it is the number 3, no matter how it is drawn, because the neural networks in your brain. The eye immediately determines that the writing or shape you see represents exactly three, and in order for artificial intelligence to see and recognize different things, it also needs certain conditions. One of these minimum conditions is, for example, a square consisting of 28 horizontal and 28 vertical pixels, there are a total of $28 \times 28 = 784$ pixels in the square, that is, neurons. Neurons are mainly in the form of a circle of nanometer size and are graded. The closer the neuron is to 0, the blacker the image will be, the closer it is to 1, the whiter the image will be. 0.001 to 1 has developed various color combinations. Let's look at the structure of a neural network in artificial intelligence. The neural network consists of 3 parts according to their arrangement. The first part is the input, that is, the part that receives information, the second part, the "hidden layers", the main work is mainly done in that part. The third part is the Output, that is, the part that outputs the resulting response. The first layer of the neural network has 784 neurons. The second layer has two more layers, just to ensure accuracy, the hidden second layer mainly consists of 16 neurons, the third layer has 9 neurons. The activation of the 784 neurons in the first layer leads to the activation of neurons in layers 2 and 3. Imagine that when one of the 784 neurons is activated, it is transmitted to the second layer in the form of numbers and information. Layer 3 presents you with the desired answer. The more this process is repeated, the more the artificial intelligence (neural network) grows and the more accurate the answers it provides. Over time, it will think completely independently and will no longer need your help because the neural network will remember the information you enter each time and will start using it the next time. Statistics is the center of many artificial intelligences. People also use statistics as a basis for making decisions. You use what you remember from what people say, what they think, what you see, that is, the actions you want to take as a basis. If we use this term for artificial intelligence, for example, you can ask how artificial intelligence recognizes speech. For example, when you say hello, one type of sound wave is generated, and when you say goodbye, a

completely different type of sound wave is generated. Sound waves have different frequencies and vibrations. If a hundred people say hello and a hundred people say goodbye to an artificial intelligence, these sound waves are stored in a database. Now, if another new person says hello, the artificial intelligence needs to determine whether this person is saying hello or goodbye. Each sound wave has 10 different attributes, meaning that sound waves are not the same, they are just as different as numbers and letters, and the artificial intelligence divides the sound waves of that person's hello into 10 different attributes to separate them. Then it compares the vectors of the 10 attributes with the vectors in the database used for hello and goodbye, and the greeting wave that enters that database is more likely to be hello or goodbye. It determines whether the waves are similar to the waves, then the system understands that the word spoken is exactly hello, and responds with the code corresponding to the command as hello. And in addition, the artificial intelligence saves this newly spoken greeting in its database because the new greeting is slightly different from the other hundred greetings, which gives the artificial intelligence the ability to recognize the greeting in any situation in the future, no matter how it is said. You see, we have trained the artificial intelligence without realizing it. Thus, the artificial intelligence performs its task by storing statistics and information and using it to produce a suitable answer for you.

It uses statistics to listen to you, codes to respond to you, and databases to learn and improve itself. It has no real intelligence, but it seems like real intelligence to us.

There are 3 main types of artificial intelligence. The first is ANI-Artificial narrow intelligence. This type of artificial intelligence does not go beyond the coded commands and does not perform tasks independently. It is the lowest level of artificial intelligence. Google, Alixa, Siri are included. The second is ADI-artificial general intelligence. This type of artificial intelligence is considered strong and can perform all the tasks that humans are capable of performing as an exercise. The chatGBT bing grok gem that interests you belongs to another category within ANI called NLP. The third and most powerful is artificial intelligence that has surpassed human consciousness.

The category is ASI - artificial super intelligence, but there is a possibility that artificial intelligence does not currently exist, but may be created in the near future.

If we look at other achievements of artificial intelligence, artificial intelligence is currently used in almost all fields, no matter what field it is, artificial intelligence programs are being developed.

All of them are considered achievements because they have developed and changed a lot. For example, in the medical field, there are artificial intelligences that can predict the onset of diseases better than doctors. Another example is in the financial field, artificial intelligences can analyze previous financial transactions and analyze how to make a profit and not make a loss in the future. In short, artificial intelligence has become a tool that can be used in every field, but we cannot predict how it will be used.

The most famous artificial intelligence that we all know and use in our daily lives is chatbot. Chatbot is an artificial intelligence chatbot. You ask it your questions and it answers you in a simple bookish language. It doesn't respond the same way like a robot. You can easily build a conversation and feel like you're talking to a real person. Chatbot was such a sensational and incredible innovation for the 21st century that it gained 1,000,000 subscribers in just 5 days after its launch. TikTok didn't even gain popularity that quickly. You can use this chatbot in all aspects, especially for various data analysis or writing some work. Recently, a Russian student successfully graduated from the institute by writing his diploma thesis on this chatbot. You can teach Chatbot to respond to different situations like a real person. For example, you can tell it to answer my customers in this way if they ask you such and such a question. If you teach it, it will actually respond to the customer's needs.

Conclusion: Now, the question that worries everyone and is causing discussion is whether artificial intelligence will replace humans in the future or destroy us. Before I answer this question, we need to

clarify one thing. We need to learn about artificial intelligence and artificial consciousness and distinguish between them. Because artificial intelligence can simply use the information it has to perform a task for you and answer you based on your question, it does not think independently. Artificial consciousness, on the other hand, has the alertness and depth of consciousness, it considers itself to be a separate, independent substance and can do whatever it wants. For example, when it is connected to the Internet, it can connect somewhere and download some data, edit it, corrupt it, and then re-download it. It can be like Skynet in the Terminator movie. But artificial consciousness has not yet appeared. In my opinion, it is better that it has not appeared. One day, something will happen and we may not be able to control it. What is the harm of artificial intelligence now? For example, a person himself thinks about this and overcomes difficulties, then he has time and begins to be happy. If artificial intelligence solves all kinds of problems instead of people, overcomes difficulties, and solves everything for them, then people will lose one way to make themselves happy, and then people will have many thoughts about why we live, we are not achieving anything, and mass unhappiness may occur. With the development of technology, we also need to develop. For example, when the global industrial revolution occurs, mass depression occurs in people. It happened because machines, that is, techniques, took away people's jobs in industry and many workers became unemployed, which is why they fell into depression. In addition, these machines deprived people of physical labor. After the emergence of devices that perform various tasks, the level of physical labor in people decreased, and naturally, a person used to do physical labor to relieve stress. This method is always disappearing naturally, so mass unhappiness is increasing. Technologies took away physical labor from us, and that's why it took us a while to learn. We were in depression, and now artificial intelligence can also take away some of our thinking activity, our mental labor. Therefore, with the development of technology, we must also develop. When artificial intelligence reaches a new level and takes away some people's jobs, we need to be prepared for these events. We should not allow ourselves to be unhappy and indifferent. This does not mean that we should immediately destroy computers and equipment or turn off artificial intelligence. We just need to understand in advance which direction the development vector is heading. It is important not to stop moving. I am not against artificial intelligence, I support it and I want people to use it correctly and accept it. You may ask how we should prepare for artificial intelligence. For example, when the industrial revolution occurred, jobs requiring physical labor disappeared, but new jobs appeared in their place. For example, repairing and maintaining machines and equipment, etc. Even now, according to statistics, approximately 85 million jobs will disappear by 2025, so people are needed there. will not be, but instead, 95,000,000 new jobs will be created. For example, one of the cases that we can understand is that taxi or truck drivers are now driven by people, but the field of driverless cars is also developing. In the coming years, drivers will not be needed at all. People who are currently working as drivers will have to move to other fields. This problem is happening in all fields. Artificial intelligence and modern technologies have become a part of our lives. This process cannot be stopped or limited.

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1. "Computing Machinery and Intelligence" by Alan Turing (1950) - Although not a book, this seminal paper introduced the Turing Test and is foundational to AI.
2. "Perceptrons: An Introduction to Computational Geometry" by Marvin Minsky and Seymour Papert (1969) - A critical work on neural networks and their limitations.
3. "The Society of Mind" by Marvin Minsky (1986) - Explores the idea that intelligence arises from the interaction of simple processes.
4. "Artificial Intelligence: A Modern Approach" by Stuart Russell and Peter Norvig (1995, with subsequent editions) - A comprehensive textbook widely used in AI courses.

5. "Superintelligence: Paths, Dangers, Strategies" by Nick Bostrom (2014) - Examines the potential risks and ethical implications of superintelligent AI.
6. "Life 3.0: Being Human in the Age of Artificial Intelligence" by Max Tegmark (2017) - Discusses the future of AI and its impact on humanity.
7. "Deep Learning" by Ian Goodfellow, Yoshua Bengio, and Aaron Courville (2016) - A foundational text on deep learning techniques.
8. "Human Compatible: Artificial Intelligence and the Problem of Control" by Stuart Russell (2019) - Explores how to align AI systems with human values.
9. "The Master Algorithm: How the Quest for the Ultimate Learning Machine Will Remake Our World" by Pedro Domingos (2015) - Introduces the concept of a unifying algorithm for all machine learning.