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Конкурсная работа на тему

“WHERE WILL AI BE USED IN THE FUTURE?”

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In our modern world, the development of scientific and technological progress is rapid. What seemed fantastic to us yesterday has now become a part of our daily lives. Every year we are pleased and surprised by new and incredible inventions. I want to speculate on what will be the invention in the future with the use of artificial intelligence (AI).

What is AI?

Intelligence or mind is a quality of the psyche consisting of the ability to adapt to new situations, the ability to learn and remember from experience, understanding and applying abstract concepts...

Artificial intelligence (AI) is a computer controlled robot or engineering program capable of thinking as intelligently as a human. This technology is aimed at creating a «machine” that can think and think like a person. When creating AI, people were inspired by the human brain, so AI is like it. The principle of AI structure is as follows: connections of "electronic neurons" are created, which are able to process and classify information. They are arranged in "layers", and each "layer" is responsible for something different, eventually forming the overall picture. The main feature of AI is that it can learn just like a human. While humanity is far from creating a perfect AI that can surpass us, but now there are developing technologies that in the near future will become a reality and will bring us to a new level of life.

Here are examples of the use of AI in various spheres of human life.

Artificial intelligence in the automotive industry.

Now many people associate AI in the automotive industry with self-driving vehicles. Unmanned cars are actively developed over the past decade, and in some places even used in test mode. The giants of the automotive industry — BMW, Nissan, Honda, General Motors, Volkswagen, Audi, BMW and Volvo-and new players in the car market: Google, Tesla and many smaller companies joined in their creation. These cars will have no steering wheel and no pedals. The principle of operation of the car with AI intelligence is as follows: a person gets into the car, tells the car the route, and it fulfills the requirement. With the introduction of driverless cars, city streets and highways should become less dangerous than now, and the number of accidents will decrease (although it is unlikely to zero). After all, the AI will not fall asleep at the wheel, will not be distracted by a conversation on the phone, will not break the speed limit, will not take a deliberately dangerous maneuver. And it certainly wouldn't drive drunk. According to statistics, more than 50 % of accidents on the roads happen due to the fact that the driver was inattentive or distracted. Neural networks of the car will save a person from the need to perform actions that detach him from the control of the car. For example, they will be able to switch the radio on a voice command, increase the volume or change the route of the trip.

Another area of application of neural networks in the car is the control of internal systems. AI, connected to the sensors and systems of the car, will be able to identify potential faults long before they become real problems, make prevention schedules, suggest the address of the nearest car repair shop and monitor THAT. And this is not all areas of application of AI in the automotive industry.

The artificial intelligence in Road traffic.

The purpose of the introduction of AI in this area-the fight against traffic jams. Such systems are already successfully operating in major cities in Europe, North America and Asia. Collecting information from traffic lights, traffic density analysis, accidents, weather data and other factors that create traffic jams-that's what is included in the functions of the computer. As a result, an intelligent online system monitors roads, predicts what traffic will be, and according to this, switches traffic lights. In some regions of our country, some parts of this system, such as smart traffic lights, are already being tested. The intelligent system monitors not only the traffic on the road, but also helps drivers. For example, it can call a tow truck if necessary. It is clear that this solution will not be able to completely get rid of traffic jams, but it is quite possible to speed up traffic at times.

Artificial intelligence in agriculture.

The widespread introduction of robotics in agriculture is represented by the following developments.

Unmanned aerial vehicle. Drones equipped with radar and GPS monitoring spray agricultural crops, provide reliable delivery of dangerous chemicals and aerial photography.

Robots for harvesting. If harvesters have existed for a long time, the robot that collects strawberries, managed to create recently.

AI, destroying the weed. Hortibot, developed by Aarhus University in Denmark, recognizes and eliminates weeds in two ways: mechanically and by spot spraying with herbicides. This robot was a real breakthrough, because the recognition of weeds from useful plants is a great success of modern robotics in agriculture. In addition, machines are created that recognize pests and diseases of agricultural crops.

Artificial intelligence in medicine.

AI is actively introduced into medicine. Already testing technologies that determine people's predisposition to diseases and detect them in the early stages, when they can hide from human eyes. Already in the near future, these technologies should be introduced as assistants to doctors in all spheres of medicine. At the end of 2017, Russian Prime Minister Dmitry Medvedev outlined a strategy that includes the use of artificial intelligence in Russian healthcare. But most likely in this area, AI will not be able to completely replace a person, since people's lives can not be trusted completely to "soulless machines". Therefore, we are waiting for the day when all diseases will be determined immediately when they appear and their treatment will occur as quickly as possible and without errors.

Artificial intelligence in everyday life.

A typical example of the use of AI in everyday life will be smart home systems. Their main task is to automate and facilitate our life as much as possible. For example, the AI can regulate the temperature in the house, close or push the curtains, take care of Pets and plants, select music to match the mood of a person, monitor security and emergencies in the house and eliminate them or inform the rescue services. The use of AI in this area is developing very quickly. We already see cameras that can recognize the faces of people, animals, cars, smart speakers and voice assistants with whom you can communicate, plant watering systems, etc. the use of AI in the household sphere can help us save time and optimize recreation.

The final development of AI

Of course, the branch invention with the use of AI is the creation of a humanoid humanoid that will help us live. While we are far from creating it, there are also many ethical issues. Many people are afraid of this invention, so many films have been made. There are fears that this machine will be so smart that he wants to enslave people, but most likely this speculation fiction. In the future, the problems associated with the creation of AI will be solved and perhaps a new Chapter in human life will come. Every day a thousand minds are working on the creation of AI and progress is visible on the face, analysts predict its full creation in 2050.