THE IMPACT OF ARTIFICIAL INTELLIGENCE SYSTEMS ON HUMAN ACTIVITY

Ikramov Islamjon
4th grade student of Namangan Engineering and Construction Institute
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Abstract: This article describes the history of artificial intelligence systems, their role in human activity and the importance of the implementation of artificial intelligence systems.

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Today, information and communication technologies are developing on a large scale throughout the world. Information and communication technologies are the main driving force of the state's economic system: they create new jobs in areas such as telecommunications, software development, and new information and communication services, such as education and training. is creating new software.

In particular, as a result of the rapid development of information and communication technologies, the development of artificial intelligence systems and their role in human life is expanding day by day. Currently, many developed countries are paying special attention to the improvement of this field. The reason is that a lot of information is received electronically in the process of globalization. We have a lot of information, but human perception is incapable of analyzing it. That is why they are turning to artificial intelligence.

The concept of "artificial intelligence" first appeared in the United States and gradually began to be widely used in other countries.

We can assume that the history of artificial intelligence begins with the creation of the first computers in the 40s. With the emergence of electronic computers with high (by the standards of that time) productivity, the first questions in the field of artificial intelligence began to appear: is it possible to create a machine whose intellectual abilities are the same as those of humans?

The next stage in the history of artificial intelligence is the 50s, when researchers tried to create intelligent machines imitating the human brain. These attempts failed due to the complete lack of both hardware and software. In 1956, a seminar was held at Stanford University (USA), where the term artificial intelligence was proposed for the first time.

The 60s in the history of artificial intelligence were characterized by attempts to find general methods for solving a wide class of problems by simulating the complex process of thinking. It turned out to be very difficult and ineffective to develop universal programs. The wider the class of problems that can be solved by a single program, the poorer its ability to solve a particular problem. During this period, the birth of heuristic programming began.

A heuristic is a rule that is not grounded in theory, but allows you to reduce the number of searches in the search field.

Heuristic programming is the development of action strategies based on similarities or precedents. In general, the 50s and 60s can be noted in the history of artificial intelligence as the time of the search for a universal thinking algorithm.

A significant breakthrough in the practical application of artificial intelligence occurred in the 70s, when the search for a universal reasoning algorithm was replaced by the idea of modeling the exact knowledge of experts. The first commercial knowledge-based systems or expert systems appeared in the United States. A new approach to solving problems related to artificial intelligence - knowledge representation - has been created. "MYCIN" and "DENDRAL" - modern classical systems in medicine and chemistry were created. In a certain sense, these two systems can be called diagnostic, because in the first case ("MYCIN"), the disease is determined (diagnosed) by a number of symptoms (signs of body pathology), and in the second - a chemical compound is determined by a number of properties. Basically, this stage of the history of artificial intelligence can be called the birth of expert systems.

The next important period in the history of artificial intelligence is the 80s. Artificial intelligence has experienced a rebirth in this segment. Its great potential was widely recognized both in research and in the development of production. The first commercial software products appeared within the new technology. During this time, the field of mechanical engineering began to develop. Until then, transferring the knowledge of an expert to a computer program was a tedious and time-consuming procedure. At the beginning of the decade, the largest national and international research projects in the history of information processing, focused on "fifth generation intelligent computing systems", were launched in different countries.

Nowadays, artificial intelligence is rapidly developing, covering various spheres of human life, and is being tested and implemented in practice in various spheres. Current technologies allow us to do things that were unimaginable even with science fiction a few years ago. From the use of robots (increasingly

human-like) capable of diagnosing health problems to autonomous vehicles. The focus is on the concept of intelligent machines that are capable of learning without human supervision and even use a structure similar to our own central nervous system. This is a rapidly developing area of technological development that may soon include living with artificial beings capable of self-awareness and even conscience on a daily basis. In other cases, it explores less "tangible" types of technology in the form of algorithms or codes on which many "invisible" processes are based in everyday life: from air traffic control to data storage and storage.

So, as science fiction loses its last name and becomes just science, people should think that they are shaping a paradigm shift in our understanding of the world with their own hands. As a vivid example of this, we cite several examples of artificial intelligence that are being discovered or are already among us. In order to organize the information in a more comprehensible way, they are detailed by areas.

Advertising. It seeks to optimize digital marketing companies with the help of artificial intelligence in a certain area of advertising. Algorithms with progressive sophistication and aimed at identifying all the needs of a potential consumer serve to show you products that may be more interesting for you. artificial intelligence performs the process of monitoring "online traffic" and the profile of each navigator in real time in order to optimize the process of choosing different places for the presentation of products and services. accelerates the field-oriented persuasion process.

This form of artificial intelligence is widely criticized as a violation of user privacy, and today it is widespread in almost the entire network. The latest laws on data protection policies oblige visitors to any place on the Internet to warn about the use of these practices (cookies, activity collection, etc.).

Transportation. Artificial intelligence continues to expand in both the public and private transportation sectors. The purpose of these technological developments is to improve the safety of vehicle passengers, as well as pedestrians who are around during movement, or even to regulate the use of roads that allow it. Some companies are conducting research to reduce environmental pollution in the future, as well as advances in this field.

Autonomous navigation systems began to be implemented in all types of vehicles. In such cases, a sequence of algorithms compiled by the central unit is responsible for processing large volumes.

More and more sophisticated computerized tools are being used every day to manage the volume of traffic on roads or highways, to monitor all environmental

conditions and to predict congestion using contextual information and statistical processing of previous events. It's even possible to detect who's using their cell phone while driving and report it to the authorities!

Finance and economics. As societies expand and become increasingly complex, people's excellent ability to acquire and process the information they generate will inevitably be limited to the extent that alternatives must be sought and implemented. These mechanisms give vitality.

Therefore, a technological revolution is required. And in this sense, artificial intelligence has found an inexhaustible field of application in the field of banking and economics.

Currently, the volume of data analyzed in the financial sector is truly enormous. However, it has the peculiarity of using mostly quantitative data (such as investments, commissions, debts, etc.), which makes it easier to run artificial intelligence with scalable algorithms for almost everyone in the future.

Currently, artificial intelligence in finance is still considered an adolescent technology. Today, the most common utilities are tax fraud detection and wealth management, although they are also beginning to apply to personal finance and loans.

Education. Artificial intelligence in education currently seeks to bridge the gap between academic activities and the autonomous and independent learning of students. The goal is to minimize redundancy in the tasks taught to young people, promoting collaborative methodologies in knowledge building and encouraging autonomy. For this, personal communication systems (Internet, mobile devices, etc.) are used outside traditional places where the teaching-learning process is developed.

Artificial intelligence contributes to the continuous assessment system by monitoring the performance of students in real time and predicting difficulties that may arise during learning, optimizing requirements and informing teachers about these situations.

Can swell. Also, it allows for the early identification of special educational needs and even specific educational disorders by various specialists involved in their treatment (therapeutic pedagogy, psychology, speech therapy, etc.) to provide faster and more effective solutions.

Industry. Currently, artificial intelligence is widely used in the industrial sector, the main goal is to automate production processes and improve material and human resources. For example, the use of flour in the preparation of flour and breads is very frequent, in which very sophisticated algorithms are used that are able to predict the events that can cause their quality or the state of the

nutritional matrix. With this type of technology, decisions are made to deal with unexpected situations that until recently required manual intervention.

Capable imaging techniques are also used to record any deviations from the standard in existing assembly lines or production lines, many of which are invisible to the human eye, before they reach catastrophic proportions or lead to significant costs for the company. warns (chain errors, factory defects, etc.).

Health care. Health care is one of the areas of life where artificial intelligence is developing today. Technologies have been developed to detect first or subsequent psychotic episodes from up to 80% functional magnetic resonance imaging data, representing an unprecedented event in the history of mental health. However, in recent years, the usefulness of these neuroimaging techniques has been questioned.

On the other hand, social networks and the huge amount of information that can be posted on them are being used as predictors of many physical and mental pathologies. So far, the most widespread use of artificial intelligence is aimed at identifying the risk of suicide and mood disorders. While AI attacks are still rare in the field of mental health, this is not the case in other related fields such as medicine. For some time, software has been developed to assess the harm caused by radiotherapy using data collected through convergence between medical records and registration or audit systems.

With this, it is possible to improve prognostic factors and estimate the secondary effect of this treatment method. In recent years, in the field of health care, there has been an effort to automate all medical records in correlation with current indicators of the state of the organism, through which algorithms predict the evolution of the patient, subject to the constant update of the evidence collected in the scientific collection. can be guessed through. In this way, professionals can automatically learn about the condition of their patients and offer treatment based on objective principles. Genetic maps, which are becoming increasingly affordable,

Will also play an important role in the ongoing digital transformation of healthcare. It is no exaggeration to say that the above-mentioned fields of artificial intelligence are important areas of human activity today. Artificial intelligence is widely used not only in the listed fields, but also in other areas and fields. . In conclusion, artificial intelligence has a great role in society, industry, science and human life.

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