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## INTELLIGENT TECHNOLOGIES FOR CREATING AND DEVELOPING OPEN SYSTEMS



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**Abstract-** The article describes the directions of development of intellectual information knowledge systems and methods of their implementation; features, characteristics and capabilities of the intellectual information knowledge system; features and characteristics of model-based knowledge demonstration models in the system of intellectual information knowledge; intellectual information is aimed at solving important tasks on the development trends of the knowledge system.

**Keywords:** intellectual information system, intellectual information system of knowledge, models, systems of knowledge.

Today, artificial intelligence is becoming more and more popular in almost every aspect of our daily lives. Artificial intelligence is usually concerned with the creation of computer systems with the capabilities of the human mind: understanding, learning, discussing, solving problems, translating, and so on. During the study of artificial intelligence, human-intelligent programming, technologies and tools for designing intelligent systems, databases, knowledge bases, database management systems, speech interfaces, computer linguistics, computer graphics, computer networks and web programming, information security in computer systems.

The main purpose of artificial intelligence was originally to play the role of an “enhancer” of the human mind, and this allowed it to solve a problem that required such knowledge, experience, and a way of thinking that it could not. It was not considered necessary or purchased until he encountered the problem. For any typological category of intellectual system (ES, NS or hybrid) to fully meet this goal, it must have the qualities (characteristics and abilities) of an ideal human assistant: - honesty, understanding, receptivity and diligence. If we turn to more specific concepts, then from the point of view of IS construction theory and practice, these qualities are interpreted as follows: - communication, interpreted as different ways of communicating with the existing system for all categories of users; - universality of the various tasks that make up the range of problems in which the system must operate; - "ability" to learn on the basis of experience and knowledge, change the conditions for solving the problem of adaptation; - appears for

reconstruction when changing the basic rules (concepts) of the subject (and therefore the problem) area [1].

Intelligence is the ability of the human brain to solve intellectual problems. The process is based on the experience of receiving, remembering, and modifying target knowledge, as well as adapting it to different contexts.

The word "knowledge" in the above definition refers not only to the information received by man through the senses, but also to the interconnectedness of all the objects in nature that surround us.

Everyone stores in their brains all the visual and auditory information around their location. Knowledge, therefore, is the result of an idea that has been tested in practice and logically determined. Basically, knowledge is a person's understanding, thinking, and theory, and it develops as a result of learning in the course of life [2].

Artificial intelligence is the ability of automatic systems to perform specific functions of human intelligence. For example, it is necessary to answer the optimal question by selecting on the basis of previous experience and analyzing external influences.

Work in the field of artificial intelligence is aimed at creating methods, tools and technologies for designing computer systems (training, expert, consulting, robotics, etc.) to solve traditional intellectual problems. is one of the most important tasks in design.

The resolution of the President "On measures to create conditions for the rapid introduction of artificial intelligence technologies" is also in line with the strategy "Digital Uzbekistan - 2030" and the rapid introduction of artificial intelligence technologies and their widespread use in the country, expanding the use of digital data. was accepted for training. This decision approved a program of measures for the study and introduction of artificial intelligence technologies in 2021-2022. The program identifies a number of tasks related to the development of artificial intelligence development strategy and regulatory framework, its widespread use in improving the quality of public services, the creation of local ecosystems of innovative developments in the field and the development of international cooperation [3].

Artificial intelligence is a technology that focuses on thinking and acting like humans on computers, artificial intelligence requires high-powered computers, data, artificial intelligence algorithms to work. According to the definition of scientists, artificial intelligence is an intellectual artificial system that performs the logical and creative functions of man. Artificial intelligence is extremely relevant in the current information age, and humanity will find positive solutions to the global problems of the XXI century through the discovery of new opportunities in science through artificial intelligence. It will also increase the availability of quality services in medicine, education, energy, agriculture, urban planning and all other areas. By September 1, 2021, a digital data platform will be created for the population and the necessary users to use artificial intelligence-based software and other data. Each of these educational institutions attracts highly qualified specialists in artificial intelligence from abroad. In addition, special courses on the application of artificial intelligence technologies in sectors of the economy and public administration will be organized at 15 universities. Any achievement of science and technology should serve the development of mankind. At the heart of the state programs aimed at the development of artificial intelligence in our country is the noble goal of improving the quality of services provided to the population, saving time and money of citizens, as well as the development of the industry at world standards.

The following areas of information technology are studied in the study of artificial intelligence: programming and object-oriented programming; intelligent programming; technologies and tools for designing intelligent systems. Databases, knowledge bases and database management systems: speech interface, computer linguistics and computer; computer networks and Web applications; information security in computer systems; Practical geographic information systems.

A graduate of the specialty "Artificial Intelligence" can work in enterprises and organizations that manufacture and operate computer equipment, computer systems and networks, software. Our country has set many tasks aimed at the introduction of artificial intelligence technologies, their widespread use, expanding the use of digital data, training qualified personnel in this field, in short, the development of the industry at the level of world standards.

In this regard, strategies for the development of artificial intelligence have been adopted in more than 30 countries, including the United States, Germany, Japan, France, Korea and Canada.

In conclusion, it should be noted that the "Joint Union" for the development of artificial intelligence is being formed in government agencies, commercial banks, large industrial enterprises. This alliance will serve for the rapid and joint implementation of priority projects for the introduction of artificial intelligence technologies in the economy and the social sphere, public administration, optimization of costs for their development, dissemination of best practices in this area among government agencies and bodies. The system increases the quality of service in all areas.

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## **ИНТЕЛЛЕКТУАЛЬНЫЕ ТЕХНОЛОГИИ СОЗДАНИЯ И РАЗВИТИЯ ОТКРЫТЫХ СИСТЕМ**

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**Аннотация** В статье описаны направления развития интеллектуальных информационных систем знаний и методы их реализации; особенности, характеристики и возможности интеллектуальной информационной системы знаний; особенности и характеристики модельных представлений интеллектуальных информационных систем; интеллектуальная информация направлена на решение важных задач по направлениям развития системы знаний.

**Ключевые слова:** интеллектуальная информационная система, интеллектуальная информационная система знаний, модели, системы знаний.