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ROBOTICS: ROLE, PROSPECTS AND PROBLEMS

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Robotics and computer technology are two key areas of modern technological progress. The development of computer technologies such as artificial intelligence and machine learning, together with advances in robotics, has led to new opportunities and challenges. In this article, we consider the interaction between robotics and computer technologies, as well as their prospects and challenges for the future of society.

Robotics and computer technology are closely related and interact with each other. Computer technologies such as artificial intelligence and machine learning are key tools for the development of intelligent robots. Robots, in turn, use computer technology to analyze data, make decisions, and complete tasks [1, p. 120].

Zurich scientists and engineers were able to create a biorobot that has no analogues. It is based on the human principle, as well as the distinctive qualities of flexible joints of tissues and muscles. In Japan, female robots have long been a daily occurrence, serving as wives or household helpers. This innovation has become the norm for agriculture, where even the land is processed by robotic tractors. In the USA, robotics technologies have become a natural part of the military–industrial complex - military complexes are constantly being introduced into the army, actively replacing manpower. In addition, robots are actively used in the space industry. Scientists tirelessly continue their research, creating unique artificial intelligences and continuing to improve robotic technology, attracting the attention of all mankind. The only thing left to believe is that advanced technologies will remain under the control of mankind and will only benefit [2, 76].

Robotics and computer technologies are used in many activities. In the industrial sector, robots can automate monotonous and dangerous work, improve production efficiency and safety. In medicine, robotics helps in complex surgical operations and rehabilitation of patients. In the

field of maintenance, robots can serve as waiters, consultants, and even household assistants [1, p. 128].

A number of problems related to the development of robotics and computer technologies have been found. One of them is the ethical aspect. The development of autonomous robots raises questions of responsibility for their actions and possible consequences. There are also dangers regarding the replacement of humans with robots in some traditional fields of work, which can lead to increased unemployment and specific problems. Robots and autonomous systems can collect and process large amounts of data. There are questions about privacy and data protection. It is necessary to develop mechanisms to ensure the confidentiality of data and prevent their abuse [3, p. 76].

Despite the challenges of robotics and computer technology, there are huge prospects for the future of society. Robots can become indispensable assistants in many cases, improving people's quality of life and productivity. In medicine, they can reduce the risk of errors and improve the availability of treatment. In the field of ecology, robots can be used to combat environmental pollution.

In conclusion, it is necessary to say that robotics and computer technology interact and enrich each other. The use of these technologies in various activities can lead to increased efficiency, safety and better quality of life. However, it is necessary to take into account the ethical aspects and social consequences of such development. In general, robotics and computer technologies have great potential for the progress and development of society, and their further development requires attention and a balanced approach.

References

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