

THE ROLE OF ARTIFICIAL INTELLIGENCE IN THE DEVELOPMENT OF THE AEROSPACE INDUSTRY

Artificial intelligence technologies have rapidly entered our lives. In many industries, this has resulted in significant advances in automation, improved productivity, and reduced risk. Let's consider how these technologies were transformed into the aerospace industry.

In the aerospace industry, artificial intelligence plays a critical role in many aspects, from design and development to mission management and equipment lifecycle support. Our country is one of the main participants in the development of robotic systems in the aerospace industry. Let's take a look at the certain efforts it is making to facilitate this process and what benefits this phenomenon determines for our country.

Artificial intelligence in the aerospace industry ensures high accuracy of tasks, reduces the human factor and contributes to increasing the efficiency of research and development of new technologies. In addition, one of the key areas of application of artificial intelligence in the field of aerospace technologies is autonomous systems. They are able to make quick and accurate decisions in conditions where human intervention is impossible or limited.

Considerable attention is paid to the development of intelligent flight control systems that allow aircraft to operate more efficiently, reducing fuel consumption and the risk of accidents. Scientists and engineers are actively using machine learning algorithms to analyze large amounts of data from satellites and other sources to predict climate change and optimize flight paths.

Artificial intelligence is also enabling improvements in the diagnostic and maintenance systems of aircraft and spacecraft. Automated monitoring systems can identify potential problems and recommend preventive measures to eliminate them. Ukrainian companies actively develop and implement innovative technologies in the aerospace industry, cooperating with well-known global partners and leading scientific centers.

The application of artificial intelligence in the aerospace industry not only contributes to technological progress, but also opens up new opportunities for

economic development, investment attraction and job creation. Government programs and initiatives are aimed at supporting the development of artificial intelligence in the aerospace industry by providing research grants and stimulating innovative projects.

One of the promising fields is the development and implementation of autonomous spacecraft capable of performing complex maneuvers on their own. Areas of research in the field of artificial intelligence in the aerospace industry include the development of algorithms for determining optimal flight trajectories, managing satellite networks, and analyzing space images automatically.

Ukraine already possesses considerable experience in the field of space research and development of space technologies, and the introduction of artificial intelligence into this field opens up new opportunities for further growth. Thanks to active development in the aerospace industry, our country maintains its place among the leading players in the world space and is able to ensure a high level of technological and scientific progress.

REFERENCES

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DIRECTIONS OF APPLICATION OF ARTIFICIAL INTELLIGENCE IN EDUCATIONAL PROCESSES

The appearance of artificial intelligence in modern life was a breakthrough in the history of mankind. Every day we perform actions that we once thought could not be automated. The main task of artificial intelligence is to simplify life and save our time and energy by performing those processes that a computer program can do for us, but much faster and with less error in calculations. As mankind once developed calculators, so now they have been replaced by a more innovative solution to modern problems. Of course, in order to be able to use artificial intelligence correctly, it is