

HOW ROBOTS HAVE COME TO HELP PEOPLE IN VARIOUS SPHERES OF LIFE

Ivan Duchenko

*Faculty of Electric Power Engineering and Automatics,
National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”*

The field of creating and improving robots has been developing rapidly in recent decades. They are gradually and confidently integrating into our lives.

Robots are created to facilitate or eliminate human labour in difficult and dangerous jobs. A well-known example is the liquidation of the Chornobyl accident, where robots were used to throw debris from the roof of the power unit, which saved many lives.

Another example is the development of robotics in the field of fruit harvesting. Apples and other hard fruits are easy to pick, but grapes are quite difficult because the berries themselves are very soft and easy to crush. However, Extend Robotics, together with engineers at Queen Mary University of London, are improving the robots' ability to do this. The researchers are implementing sensors that collect information about grape bunches and use AI to determine whether the grapes are ripe. If so, the robot carefully plucks the bunch of grapes without any loss (The Economist Newspaper, 2024).

Robots also work in places where humans cannot work physically, such as on Mars or in volcanic vents. The first Mars Pathfinder robot has been working on Mars since 1997. Since then, 6 robots have been working on that planet, which in turn help people explore the new planet (Marshall & Grossman, 2009).

Thus, people are rapidly developing robots and AI to control them so that in the future we can avoid working on dangerous and difficult tasks and reduce human losses.

References:

1. The Economist Newspaper (2024, October 23). *Winemakers are building grape-picking robots*. Retrieved from <https://www.economist.com/science-and->

technology/2024/10/23/winemakers-are-building-grape-picking-robots

2. Marshall, M. & Grossman, L. (2009, September 14). Planetary explorers: Space rovers. *New Scientist*. Retrieved from <https://www.newscientist.com/article/dn17775-planetary-explorers-space-rovers/>