ROBOTIC INTEGRATION IN OUR LIVES

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For many years, in science fiction movies and books robots were something fantastic and made people think about future. However, this "future" has come – robotic integration is transforming many industries.

When we talk about robots, we mean not only robots, imitating people. The meaning of word "robot" in the root has changed in comparison with previous years. Most of current robots do not have physical body and work in computer programs. Most people do not even suspect their existence. For example, Googlebot is Google's web crawling bot which programmers also called a "spider". The process, which called "Crawling" is used by Googlebot to discovers new and updated pages to be added to the Google index[1]. Each search engine has two or more bots like Googlebot.

Now we see the huge tendency of growth neural network that open new powerful opportunity in constructing different kind of robots with new abilities in predicting. According to pseudo analyze of previous attempts robot, that working on neural network, tries to avoid antecedent mistakes, so it becomes more correct in future.

The IFR[2] reached 200,000 units of installed industrial robots in 2014, and have grown 12 percent annually between 2015 and 2017. It has increased the world's industrial robot population to more than 2 million in 2017. It means that robotic development of mechanical engineering is growing every year.

The common practice of robotics is invariability of a robot's shape. All its parts have fixed structure and are configured to perform certain tasks. Scientists of the Laboratory of Computer Science and Artificial Intelligence MIT (CSAIL)[3] have developed a bot that can transform, using various "suits" for this. They presented their work in the journal Science Robotics on September 27 this year. The robot can transform into a "bot-wheel", that allow it moves twice as fast as its normal state.

"Bot-boat" can swim on the water, carrying loads, twice the weight of the bot. The "bot-glider" can hover on large distance in compere with size of itself, using a removable sail. And it is not the end of development! Similar ideas for using of different "suits" for large robots are not uncommon, but the creation of such a small structure, capable of transformation was almost impossible up to these days. According to Eric Diller (professor at the University of Toronto), the work of MIT scientists demonstrates that their approach successfully copes with creation five different types of transformation in one robot. Previous attempts in majority were limited by only two functional, consisting of two possibilities - to take off and put on one exoskeleton.

To sum up, nowadays people try to simplify their lives by many ways, because it gives us an opportunity to give routine work to robots and spend our time on other, more important things, that today robots cannot do. According to a growing statistic of using robots, they are very popular and in great demand of worldwide communities. Thus, we can make a prediction that its popularity will grow year by year.

REFERENCES

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