

ROBOTIC INTEGRATION INTO EVERYDAY LIFE

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Today’s life of humanity is inseparably associated with technology. Every day we use hundreds of different electrical devices, starting with bulbs to light our homes, and ending with powerful counting machines to do complex operations, but even this variety is not the limit of our technological ideas.

Since the last century we have been trying to make our life as easy as possible by creating mechanical assistants called “robots”, and we have reached a lot in fulfilling this mission. The robot is a thing that performs various actions without our interference as all we have to do is give it orders. Actually, we are now surrounded by robots. We use them everywhere: in factories to manufacture machine parts, in traffic lights to control road traffic, even software of your PC is a kind of robot too, and it is just a miserable part of its real scope of applications. At present scientists are constantly working in this direction, expanding functionality and processability of robots.

For example, robotics scientists of Israel have achieved some success in medicine. According to a newly published study in neuroscience, the researchers tested user preferences when interacting with a robot on a joint movement task and

that was a first step toward the development of an interactive movement protocol to be used in rehabilitation [2]. On the basis of this technology, existing artificial dentures can be improved, making them more comfortable, more reliable and more functional. This technology would help people to recover after serious injuries. Also, this technology allows creating a robot that will help surgeons in complex operations by carrying out sharp and smooth movements, achieving incredible accuracy.

Another example can be found in robotics made by European scientists that may be useful for mining industry. The researchers who are part of a European Union-funded project called ¡VAMOS!, which stands for Viable Alternative Mine Operating System, have created robotic underwater miners that can go where humans cannot [1]. A lot of mines are below the water level and therefore they are constantly flooded and it is necessary to pump out water so that people could work there. In mines it is always insecure and very dangerous as loud noise causes vibrations that can overturn and ruin the mine. Still, mines must be deep because the deeper the ore is, the higher is the ore quality. In this respect, the robotic miners would be the best decision if the mines became too dangerous for people or were flooded.

The robots are so quickly integrated into our everyday lives that they will soon become a commonplace. Robotic police officers have long and firmly settled in science fiction but the authorities in Dubai plan to begin to transfer this fantasy into reality [3]. The first such robot has already become one of the Dubai defense lawyers. It looks like a human but instead of his feet it has wheels and so he is pretty mobile. It is also equipped with cameras and software that allows it to appreciate people and their emotions. However, this model is not intended to catch criminals. The robot is designed to help residents and guests of the city to contact the police. Thus, such robots will help to prevent many offenses and also keep the police officers on the job. Dubai authorities are going to create a whole team of such robots.

In conclusion, our life has long been affected by the presence of a variety of robots, and they are around us in factories and power plants, in universities and schools, in supermarkets and at home. One way or another we deal with robotics, and eventually the integration of robots into our life will be intensified. We continue to

create new robots and improve existing ones. Despite the fact that robotics is a relatively new technology, we have already made considerable progress in this field and will move on to reach further success.

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