

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ КАФЕДРА ІНОЗЕМНИХ МОВ ЛІНГВІСТИЧНИЙ НАВЧАЛЬНО-МЕТОДИЧНИЙ ЦЕНТР

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ХІV ВСЕУКРАЇНСЬКОЇ НАУКОВО-ПРАКТИЧНОЇ КОНФЕРЕНЦІЇ СТУДЕНТІВ, АСПІРАНТІВ ТА ВИКЛАДАЧІВ ЛІНГВІСТИЧНОГО НАВЧАЛЬНО-МЕТОДИЧНОГО ЦЕНТРУ КАФЕДРИ ІНОЗЕМНИХ МОВ

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THE RELATIONSHIP BETWEEN TECHNOLOGY AND THE ENVIRONMENT

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Our planet is in danger and if we want to continue living on this planet comfortably we must help it. With the coming of technology our lives have changed a lot, but resources have begun to decline, the environment has become deteriorated, and the climate has changed. Over time, people begun to use technology to preserve the environment.

One of the most important environment problem is pollution. There are different ways to solve this problem with technology including robots. Robotics is already a multibillion-dollar industry with its core in manufacturing automation. The market for robots that can perform basic chores such as cleaning, mowing, and vacuuming is already significant. We have a robot-cleaner DustClean, which cleans garbage in the streets and Waste Shark – this is a robot that removes garbage in the water and has a shape of a shark.

One of the best ideas of mankind is recycling. Thanks to recycling we can use the waste products for the second time or even turn them into energy. To protect the environment, we started using electric machines, and factories try changing the way they are produced so that harmful gases get into the air in less amounts.

Now we have many ideas for protecting the Earth that are quite possible to bring to life. Using advanced technology when building or upgrading infrastructure can help reduce climate-related risks. The climate-resilient technology is already being incorporated not only into the construction industry but also into business processes of many different industry sectors. According The Guardian, if even new building for the next 30 years was made with a material which absorbs carbon dioxide, humans could eliminate the globe warming pollution.

Another way where automation makes sense is the aerospace industry. Addressing the issues of the climate changes and environmental protections, pilotless vehicles, more commonly known as drones, can be used not only in the military but also used as inspection robots. Drones are used for hundreds of commercial applications as fully autonomous machines. Maritime and terrestrial drones used individually or deployed to work together can gather and store information and data to assess and monitor the quality of the environment, particularly in areas that are too dangerous to access for humans. Modern aerial vehicles whether rotor-based designs or fixed-wing versions, often flexible and able to monitor capabilities are used in a project called Global Forest Watch. The platform uses satellite and drone sourced data to track deforestation around the world in near real time.

But more generally, IT and robotics companies are also starting to use advanced AI and software programs to understand better the ways how land is used by analyzing land cover maps. These solutions help to explore how efficient the areas are that need special environmental protection. The application of Earth Cube, for instance, shows the impact of development on the Earth whether that is on the air or ozone layer. But also IoT (Internet of Things) is one way to help reduce the environmental impact of human activity. Sensor-enabled electronic devices are already helping monitor the impact of cities, collect details about sewers or air quality which is commonly used by citizens to check the air quality conditions before leaving home.

Unfortunately, our planet has a lot of problems, but it's not too late to solve these problems. That is why we use new ideas, technologies and just care about the environment.