The Designing of Remote Control System “Robot Snowplow”

Mikhailov, Evgenii (School: Municipal Budgetary Educational Institution "The Hibinsky Gymnasium")

The focus of the work is to create a robot that could help people to clean different areas from snow. In order to let people walk safely across the cleared area the robot spreads icing bedding material. The peculiarity of this robot lies in the fact that it can receive the commands remotely. The result of this work was the designing of a robot for clearing snow from the school area. To achieve these goals, a system of remote control robot snow plow has been developed. Also, the economic effect of the project was calculated. The possible economic benefit is 21.6 %. A scheme for connecting the EV3 unit to a real tractor has been developed. If you install a unit EV3 on a KIOTI tractor, it could reduce the cost of the work. Besides, it will be possible to control the tractor remotely, rather than using the driver. After the operational test, the author confidently claims that the “Robot Snowplow” will make the hard work of yard keepers easier. The main goal of the robot is to protect human life, to make it more comfortable, improve working conditions, to free up manpower, increase productivity. Thus, the yard keepers can stay inside and control their "iron" friend.

Awards Won: