

EcoRobot

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The goal of our project is to develop both an automatic and a manually operated device for cleaning small water bodies from domestic waste. It is known that the disposal of household waste such as cellophane bags, cardboard, plastic containers into small water bodies not only pollutes the area, but also has a negative effect on the appearance of cities. In the cold season of the year, there is a need for such a robot aimed at facilitating the work of workers engaged in waste collection and preventing them from coming in contact with cold water. For this purpose, we have developed such a robot that can collect waste freely without the application of artificial intelligence and human factor. Reasonable price of our project does not create any obstacle in its transformation into a commercial product. By conducting a series of research, we determined that some existing robot systems used only manual control and solar panel. In addition to these features, artificial intelligence is also applied in the device we offer.

Innovative features: Determining the location of the waste with recognition technology and moving towards the waste. Determining when the waste automatically reaches a certain level in the container by means of an ultrasonic sensor. The advantage and difference of our project from existing products: Without the human factor, it will identify the location of the waste and approach it and collect the waste. Will have both automatic and manual control system. When the waste in the container reaches a certain level, it will be automatically detected by an ultrasonic sensor and the robot will approach the shore.

Awards Won: