

# Water Cleaning Robot

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**Abstract:** *Water is essential to many aspects of our daily life. It is an amazing, essential source of life. Rivers and other bodies of water remain a major source of drinking water for many towns and communities. However, the quantity of trash in these bodies of water is more than just an annoyance; it is a danger to the environment, our lives, and the lives of those we care about. Trash accumulation in our rivers and creeks can be exacerbated by a single piece of garbage left on the ground. Even while the water is purified before it reaches our homes, it cannot be adequately purified to render it unsafe for human consumption if these bodies of water are still contaminated. To make sure maintaining our river systems and keeping them free of pollution is crucial to ensuring that water keeps flowing from our taps. These are what motivate us to work on this project. In an attempt to collect trash that floats in the aforementioned water bodies, we are developing an autonomous water surface cleaning robot that will navigate through them. Our primary objective is to maintain the cleanliness of the water bodies without human oversight. The robot will be given the zone to traverse while gathering the previously described trash and floating across the area. In order to offer real-time views and identify any waste materials in the water body, we also plan to install a camera on the robot. A belt that is attached to the The waste products are to be collected by boat. A conveyor belt transports the waste items to a collection station, where they are gathered and stored until the boat docks once more*

**Keywords:** Floating waste products; Autonomous; Conveyor belt