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Solar Based River Water Garbage Collector

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Abstract: This paper presents Arduino based project of a Solar powered Robot for Water Garbage collection is a self-sustaining, eco-friendly solution for cleaning up water bodies. The robot uses solar power to charge its batteries and is equipped with a garbage collection mechanism to collect and dispose of floating debris. The robot's navigation is controlled by an Arduino microcontroller, which uses sensors to detect obstacles and adjust its course accordingly. The robot's design is modular and can be adapted to different water body sizes and shapes. The robot has potential applications in a variety of industries, including municipal waste management, aquaculture, and environmental monitoring. This project demonstrates the potential of combining renewable energy and robotics to develop sustainable solutions for environmental challenges.

Keywords: Arduino, Microcontroller, Waste Management, Garbage Collection, WI-fi Connection

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