

# Solar-Based Water Surface Cleaning Boat

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**Abstract:** *Water acts as a great essential life source. It is a well-known fact that life began with water and water cleanliness is a very important aspect of life to survive on earth. But, the by-products of science laid their monstrous footsteps as pollutants. Most of these pollutants are toxic and are affecting adversely the water resources (wells, lakes, rivers, and sea), living organisms in the water, and all dependent organisms. Also, due to the carelessness in the use & maintenance of water bodies, millions of tons of plastics and other floating wastes are dumped into the water daily. Most of the time, the water bodies are cleaned manually with human labor which requires a lot of time and cost. To address this, the proposed project aims at the design and development of an ESP32 Cam-controlled surface water trash cleaning semi-autonomous boat with a robotic arm.*

**Keywords:** Solar Water Cleaning Boat

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