

A Review on IoT-Based River Surface Cleaning Robots for Aquatic Waste Management

Sakshi Vijay Awari¹, Sudarshan Vijay Pulate², Saurabh Dattu Gadakh³, Prof. Bhoir. N. V.⁴

^{1,2,3,4}Department of E&TC Engineering

Vidyaniketan College of Engineering, Bota, A.Nagar, MH

Abstract: *This paper reviews the current technological advancements in river surface cleaning robots that utilize IoT, automation, and remote control technologies for aquatic waste management. With increasing pollution levels in water bodies, there is an urgent need for efficient, safe, and scalable solutions for cleaning operations. This review highlights various designs, control mechanisms, communication protocols, and mechanical systems employed in recent developments. It also discusses challenges, future directions, and environmental significance of adopting such robotic solutions for sustainable water resource management.*

Keywords: River Cleaning Robot, IoT, Waste Collection, Water Pollution, Remote Control

