SONA COLLEGE OF TECHNOLOGY
(AUTONOMOUS INSTITUTION)
DEPARTMENT OF INFORMATION TECHNOLOGY
MINI PROJECT – U19ADS704 (2023-24)

DATE: 21/08/2023

BATCH NO:		
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TITLE OF THE PROJECT:	**AQUATIC TRASH DETECTION USING MACHINE LEARNING**	
DOMAIN NAME/AREA:	**Machine Learning**	
Algorithm/Technique used:	**Image Segmentation, Object Detection, Convolutional Neural networks, Transfer Learning**	
REFERENCE (JOURNAL/ ON LINE RESOURCES/OTHERS)	**AquaVision: Automating the detection of waste in water bodies using deep transfer learning By : Harsh Panwar, Pradeep Gupta, Mohammed Khubeb Siddiqui and Ruben Morales-Mendez**	
GUIDE NAME & SIGNATURE	**DR . J . AKILANDESWARI**	

ABSTRACT :

Aquatic trash detection presents a groundbreaking solution to the critical challenge of aquatic waste management.Aquatic trash detection employs cutting-edge algorithms, including Convolutional Neural Networks for pattern recognition, Transfer Learning for domain-specific adaptation, Data Augmentation for diversity, and Ensemble Learning for heightened accuracy. These techniques collectively empower Aquatic trash detection to automate waste detection in aquatic environments effectively. This innovation holds the potential to revolutionize waste management, safeguard aquatic life, and secure the future of our water ecosystems. This method can also find applications in aerial waste detection and the classification which will eventually help in cleaning various water bodies with less human efforts and great precision.

PROJECT COORDINATOR