

A Scalable Smart Dustbin Which Distinguishes Biodegradable and Non-Biodegradable Garbage

India being the second most populated country in the world, improper waste management has become a root cause for various environmental degradation, such as water pollution, soil pollution, air pollution etc. At least 70% of this problem can be resolved by proper segregation of the waste as bio degradable and non-bio degradable materials.

Problem statement:

To create an affordable solution for proper segregation of Biodegradable and Non-Biodegradable material.

Our solution:

- We are designing a new model for dustbins, fitted with cameras to capture the entering garbage.
- These captured frames are transferred to our **pretrained model, that classifies the materials into Biodegradable and Non-Biodegradable Garbage, based on ML algorithm.**
- These materials are weighed individually within the dustbin, and are dispatched to their respective repository.
- Based on weight and degradability of the materials, points will be awarded to the particular depositor's account, in a web portal.
- The depositor can avail rewards using these points in forms of cash backs, gift cards etc.

