

TITLE & YEAR	AUTHOR(S)	PROBLEM STATEMENT	TECHNIQUES	ADVANTAGES	DIS-ADVANTAGES
Waste Management System Year: 2019	W. A. L. Gayanthika, G. K. C. D. Maduranga, A. I. S. Silva, S. D. H. S. Wikramaratne, R. M. I.	Few waste treatment options are available to manage waste and so they are more expensive than landfill costs.	smart garbage dustbin, microcontroller, monitoring, sensor	It helps administration to generate extra revenue by advertisements on smart devices.	Sensor nodes used in the dustbins have limited memory size.
Iot Based Smart Dustbin Year: 2020	Telugu Maddileti , Harish Kurakula	Here we propose a smart dustbin that operates automatically to help solve this issue using IOT and sensor based circuitry.	Smart dustbin, GSM, arduino module, waste management.	This dustbin automatically opens the lid of the dustbin upon detection of human hand and waste without being able to touch the dustbin which is very hygienic.	Wireless technologies used in the system such as zigbee and wifi have shorter range and lower data speed.
Implementing Intelligent Bins in Transport Systems Year: 2020	Ms. Akhila Joseph, Ms. Anjali, Ms. Suhaila B.M and Mr. Mahesh B.L	Aiming at the problem that it was difficult to popularize accurate garbage sorting and delivery, a kind of intelligent garbage bin that is more intelligent, efficient, and functional.	Lumping of the garbage, microcontroller, the single directional cylinder, smart dustbin.	Implementing BI can help companies identify ways to increase profit, track their performance, optimize operations, compare data with competitors, and more.	It reduces man power requirements which results into increase in unemployments for unskilled people.

TITLE & YEAR	AUTHOR(S)	PROBLEM STATEMENT	TECHNIQUES	ADVANTAGES	DIS-ADVANTAGES
SOLID WASTE BIN SYSTEM Year: 2021	Md. Shafiqul Islam,M. A. Hannan, Maher Arebey, HasanBasri	To design a System Based on Arm 7 for collecting the garbage from a particular area – the area whose public Garbage Bins are overflowing with prior concern.	Arduino UNO, GSM module, Ultrasonic sensors, Emonitoring, Embedded system, Waste management, Wi-Fi module.	It houses intelligent safety sensor which stops compaction cycle when it detects hand of human being.	SSDs will be more expensive than conventional complex disk systems.
SMART TRASH CANS Year: 2021	Srinivasan P, Thiyaneswaran B, Jaya Priya P, Dharani B, and Kiruthiga V	Bin-e says it has been working for more than a year on the smart trash can, which recognises, categorises, sorts and stores the rubbish as and when it is deposited.	Ultrasonic Sensor, PIR Sensor, Servo Motor, DC motor.	It will be easy to keep your home clean and healthy. This can be used outdoors and indoors.	Some people have had problems with children falling in garbage cans. So, you should monitor your kids ensuring they are safe around garbage cans.
SMART DUSTBIN USING ARDUINO Year: 2020	Mamta Pandey , Anamika Gowala MrinalJyoti Goswami, Chinmoy Saikia And Dr. Dibyajyoti Bord.	The problem is not all dustbins are filled at the same rate and the dump vehicle waste time checking each and every dustbin.	arduino, micro-controller, IOT, circuitry.	Smaller size as of dust particles • Light in weight • Lower cost • It helps in reducing time for the farmers due to better fertilization management.	• The privacy is the major concern which needs to be handle properly. • Higher cost due to availability of high cost sensors used in the smart dust design.

TITLE & YEAR	AUTHOR(S)	PROBLEM STATEMENT	TECHNIQUES	ADVANTAGES	DIS-ADVANTAGES
SMART DUSTBIN FOR ECONOMIC GROWTH Year: 2018	U.Nadaraju, Ritu Mishra, Chaitanya Kumar.	To implement a smart bin built on a micro-controller based platform Arduino Uno board which is interfaced with GSM modem and Ultrasonic sensor.	Arduino, GSM, PIR sensor, Ultrasonic sensor, Servo motor.	Improving safety, efficiency, and compliance, Reducing system and infra-structure costs, Increasing productivity.	One of the major disadvantageo f SmartDust is the privacy issue for organizations using it. Detecting even the most subtle changes.
SMART GARBAGE DUSTBIN Year: 2019	Shephali Rakhunde, Shreya Ghavghave, Shraddha Jagtap, Priyanka Chimegaokar , Mr. J.Y. Hande	To dispose the waste by using the help of these sensors’ authorities can get about the bin is over flowing by the information given by sensor.	Smart garbage dustbin, micro-controller, monitoring, sensors, vending machine.	Our system provides greater accessibility to the dustbin and It will save fuel and time using appropriate route planning.	The process is not always cost-effective and Garbage segregation is very difficult. The practices are not done uniformly.
IOT based Smart City Bin Year: 2019	Roshni Bhandari , Singh Nidhi , Rathod Swapnil, Desai Dhruvi , Kotadiya Harsh.	The burgeoning of IoT has paved the way for enhancements in many aspects of life. One issue that needs to be improved is the handling of garbage collection.	Arduino UNO, GSM module, Ultrasonic sensors, monitoring, Embedded system, Waste management, Wi-Fi module.	It can assist in the smarter control of homes and cities via mobile phones. It enhances security and offers personal protection.	We lose control of our lives—our lives will be fully controlled and reliant on technology.

TITLE & YEAR	AUTHOR(S)	PROBLEM STATEMENT	TECHNIQUES	ADVANTAGES	DIS-ADVANTAGES
Smart Garbage Monitoring System using IOT Year: 2018	K. Maheshwaran, P. S. Alexpandian, A. Anton, V. Subramaniyan, S. Satheesh Kumar	This system a dry waste a wet waste separately for that we are using a moisture sensor if that sensor detected then the cap will open for dry waste.	Ultrasonic sensor, Arduinio board, WI-FI module, bread board,power supply.	Less time and fuel consumption as the trucks go only to the filled containers. Decreased noise, traffic flow and air pollution as a result of less trucks on the roads.	A major concern surrounding Smart Dust technology is its capabilities to breach human privacy in innumerable ways.