



RMD ENGINEERING COLLEGE

SMART WASTE MANAGEMENT SYSTEM

Literature Survey

Date: 27-10-2022

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| S.NO | PAPER TITLE | AUTHOR | PUBLISHED YEAR | DESCRIPTION |
|------|--|-------------------------------------|----------------|---|
| 1. | Smart Waste Collection Monitoring System using Internet Of Things (IOT). | *Saurabh Pargaien *Neeraj Pandey | 2021 | Timely cleaning of dustbin is a big challenge and if left unaddressed, it may pose several health risks by making the place unhygienic. Current system for the waste management in local areas of small and highly populated cities is sluggish which leads to a lot of garbage strewn all over the city. In this situation automatic monitoring and controlling of garbage using IOT can play a significance role in garbage management. This paper proposes a smart and fast approach for waste management by creating a network of smart dustbins equipped with sensors and micro controllers in a city which is monitored by a central control unit to speed up the process in an intelligent and smart way thereby eliminating such hazardous conditions caused by the current sluggish system. The proposed system also takes into account the issue of improper internet connectivity. |

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| 2. | Raspberry Pi-based Smart Waste Management System using Internet of Things. | * Rajesh Singh * Shaik Vaseem Akram | 2021 | <p>Nowadays it is becoming a difficult task to distinguish wet and dry waste. The new waste management system covers several levels of enormous workforce. Every time labourer must visit the garbage bins in the city area to check whether they are filled or not. The data communicates to the cloud server for real time monitoring of the system. With the real time fill level information collected via the monitoring platform, the system reduces the garbage overflow by informing about such instances before they arrive.</p> |
| 3. | Garbage Management with Smart trash using IOT. | *Dilip Kumar Patel *Ankit Mishra | 2020 | <p>The waste produced day to day seems to be unstoppable, from small scale to large scale it is increasing constantly. People also do not take it seriously because either they are not aware or not taking responsibility regards it. To reform the current scenario, we have proposed model of Smart Trash. Here, we made system automatic so that human need not to put extra effort, except dumping garbage in the trash. Also, we proposed management system where if trash is full and it is not made empty on time, message will be delivered to concern authorities. This is not only the beauty of proposed model but it also attracts more people and create an effective waste management system.</p> |
| 4. | IOT BASED SMART WASTE BIN MODEL TO OPTIMIZE THE WASTE MANAGEMENT PROCESS. | * Suriyaa Kumari *Ravi Supunya | 2018 | <p>Waste management has become one of the crucial universal problems at present. The rapid growth in world population, their complex living styles and the rate of urbanization have increased the amount of solid waste produce. The proposed solution will notify the user and other authorities when the waste bins are getting filled or when there is an unusual condition inside the bins like having high temperature or high humidity. Users can take necessary action based on the details. Researchers have used the layered architecture to develop this model and the main objective of the project is to gather waste collecting data and inform householders and relevant authorities online. Therefore, the garbage will be collected on time-to-time basis.</p> |

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| 5. | Smart Waste Management System using WSN & IOT. | * Sivasankari * Bhanu Shri | 2017 | <p>In this paper, they use Wireless Sensor Networks and IOT. The garbage bins are deployed with sensors and they are networked together using WSN. The sensors deployed in the garbage bins collect the data for every determined interval. Once the threshold is reached, it raises a request to the Garbage Collector Agent(GCA). This agent collects the requests of all the filled vehicles and communicates using the IOT framework.</p> |
| 6. | RFID based Smart Solid Waste Management | * Vinod M Bothale * Suchit Purohit | 2011 | <p>Radio frequency identification (RFID) is one of the most promising and anticipated technologies in recent years. The system provides real time monitoring of the waste collection system through a web based application available to administrators for decision making like reallocation of routes and containers etc. and management issues like observing performance of contractors, observing waste generation characteristics of particular area etc. and to the citizens providing transparency in civic administration.</p> |

