SMART WASTE MANAGEMENT SYSTEM

LITERATURE SURVEY

**Smart waste management system(2021)**

-Sanjiban Chakraborty, Aniket Mehta

The technology is built on the IOT,Android,Web and cloud.The components used are smart bins (bins connected with sensors), GPRS vehicle tracking and an android web application which will act as a bridge between the user and the municipal corporation. RFID TAGS which is used for reading,collecting and transferring data. Software used are REACTJS, NODEJS and AWS cloud service.

**Smart Waste Management With WSN, IoT(2017)**

-Sivasankari, Bhanu shri

In this project, Infrared sensors detect the level of garbage.LCD displays the level how much the bin has been filled. By embedding processing and communication with the physical world, Wireless Sensor Network(WSN) is used as a tool to bridge real and virtual environment. Data collected are transferred to Central Processing Unit(CPU) which runs the GCA.

**Smart Waste management - To Citizens(2020)**

-Joel Rodrigues, Ashok kumar Das

The system proposes a three layer architecture which are application, network and perception layers. Perception layer is similar to physical layer in OSI model. Network layer is used to transfer the information and this layer uses Zigbee, Zwire and GSM. The waste bin has sensors such as HC-SRO4 and Ultra sonic sensor. A GPS module is used to print Geographic coordinates. The total power of the system is made by an external rechargeable battery coupled to a solar cell.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Author | Title | Technology | Primacy | Result |
| 2021 | Sanjiban Chakraborty, Aniket Mehta | Smart waste management system | IOT,Android,Web and cloud | Correct data of the level of waste in the bins are noted | Analysis has been carried out and results indicate that urban solid waste comprises mostly biodegradable and non-biodegradable materials. |
| 2017 | Sivasankari, Bhanu shri | Smart waste management with WSN | ioT,WSN | The information of overflowing of bins can be easily be known to the municipal corporations | By implementing this project we will determine the stuffed up dustbins and give indication to the GCV(Garbage Collector Vehicle). |
| 2020 | Joel Rodrigues, Ashok kumar Das | Smart waste management-To citizens | Zigbee,Zwire,GSM,ioT | Zigbee is used to transfer the information giving accurate data | Eﬃcient IoT-based and real-time waste management model for improving the living environmentin cities, focused on a citizen perspective |