**LITERATURE SURVEY**

1 Waste Management And System

Author:Joshua Reno

Discard studies have demonstrated that waste is more than just a symptom of an all-too-human demand for meaning or a merely technical problem for sanitary engineers and public health officials. The afterlife of waste materials and processes of waste management reveal the centrality of transient and discarded things for questions of materiality and ontology and marginal and polluting labor and environmental justice movements, as well as for critiques of the exploitation and deferred promises of modernity and imperial formations. There is yet more waste will tell us, especially as more studies continue to document the many ways that our wastes are not only our problem, but become entangled with the lives of nonhuman creatures and the future of the planet we share.

2 IoT based garbage management (Monitor and acknowledgment) system:

Author:Sudharani Ashok Ghadage, Neeta Anilkumar Doshi

Solid waste management is one of the primary problems that India faces irrespective of the case of developed or under development states. It is seen that most of the garbage’s across the roadside are overloaded because the waste is not collected periodically. It creates unhygienic condition for the people and creates bad odor around the surroundings. This leads in spreading some deadly diseases and human illness. Most of the time wet and dry wastes are not separately collected so that proper processing like composting, recycling, incineration cannot be applied to different kinds of waste. Author proposes a system which will take care of proper processing of garbage. The reviewed systems use ultrasonic sensor, infrared sensor for detecting the level of waste, Arduino UNO , microcontroller, Raspberry Pi2 as controlling boards. The proposed system uses ultrasonic sensors (as they are precise and have large range) to sense the level of garbage in the bin, flame sensor to detect the fire and moisture sensor to separate out wet and dry garbage. By using global system for mobile (GSM) the concerned persons (driver of garbage collecting vehicle as well as concerned authority) shall be informed through SMS. The officials shall monitor the status of waste bins through web page. As huge data is to be transmitted and processed fast Raspberry Pi3 is preferred as controlling board.

3 IoT based waste management: An application to smart city

Author:BS Malapur, Vani R Pattanshetti

Emerging Technologies of IoT are transforming slowly with Cities administration. As cities will generate waste at an alaraming rate which needs collection of waste in smarter way, this collection of waste must be within time and trip planning should be done in real time, based on the status of waste. Earlier efforts were on collection of waste with smart bins but garbage collection to their places and plan trip in an optimal path is not much considered. Author proposed IoT technologies with management of waste and trip management in cities is done, so that cost and time are reduced with optimized path for waste collection. Thus proposed effective results for same.

4 IoT Based Smart Trash Bins

Author:Chaitanya Jambotkar, Shamlee Rashinkar, Sneha Ghatole, Swati Kadapatti, Varsha Yadave

The main plan of planned work is to develop a wise Intelligent garbage alert system for correct garbage Management. A smart alert system is meant for garbage clearance by giving an associate alert signal to the Municipal internet server for immediate cleanup of ashcan with correct verification supported level of garbage filling. This method is assisted by the inaudible device that is interfaced with Arduino UNO to envision the amount of garbage crammed within the garbage bin and sends the alert to the municipal internet server once if garbage is ninetieth crammed via IoT.Once the alert is received, Municipal Corporation takes initiative to scrub identical. After cleanup the rubbish bin, municipal internet server gets updated regarding the rubbish bin been cleansed. This system provides information regarding the status of how a waste collection is being done and followed up by the municipality authority. The technologies used at disposal to develop this sensible system have conjointly evolved, i.e. from WSNs to RFIDs to now the most popular Internet of Things (IoT). At the hardware level, the sensor system may be a garbage bin with an inaudible device, a micro-controller and Wi-Fi module for transmission of information.

5 IOT Based Smart Garbage Monitoring and Alert System Using Arduino UNO

Author:K.Harika, Muneerunnisa, V.Rajasekhar,P.Venkateswara Rao, L.J.N SreeLakshmi

The Author describes the most theme of the work is to Develop a wise alert system for garbage clearance by Giving AN alert signal to the municipal net server for fast Cleanup of dirt bin with correct verification supported Level of garbage filling. This method is motor-assisted by The inaudible sensing element that is interfaced with Arduino UNO to see the extent of garbage stuffed within The dirt bin and sends the aware of the municipal net Server once if garbage is stuffed. The entire method is Upheld by AN embedded module integrated by Exploitation GSM and GPS with IOT facilitation. The $64000 time standing of however waste assortment is Being done might be monitored and followed up by the Municipality authority with the help of this technique. Additionally, to the present the mandatory remedial Measures might be tailored. A humanoid application is developed and connected to An online server to intimate the alert kind the Microcontroller to the urban workplace and to perform The remote observance of the cleanup method, done by The staff, thereby reducing the manual method of Observance and verification. The notifications area unit Sent to the humanoid application exploitation Wi-Fi Module. Arduino UNO is the main Module during this Project. The inaudible sensing element that is interfaced With Arduino UNO to see the extent of garbage stuffed Within the trash bin. GSM/GPRS Module is employed to ascertain Communication between a user pc and a GSM-GPRS System and exploitation this module we have a tendency To get the SMS notification from the trashcan.GPS Module may be a navigation device it’ll indicate the Situation wherever garbage is stuffed and by exploitation Wi-Fi Module we have a tendency to get distinctive IP-Address for SMS and conjointly Municipal Officer will See the rubbish bin standing in “All things talk” Computing machine.