SOLAR POWERED IoT BASED GARBAGE MONITORING SYSTEM

A Project report submitted in partial fulfillment of the requirements for the award of

degree of

BACHELOR OF TECHNOLOGY

IN

ELECTRONICS AND COMMUNICATION ENGINEERING

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CERTIFICATE

This is to certify that the project work entitled "SOLAR POWERED IoT BASED GARBAGE MONITORING SYSTEM" is being submitted for the partial fulfillment of requirements for the award of Bachelor of Technology in Electronics & Communication Engineering, is a bonafied work done by **L.ROHINI (14811A0480), M.SRINIVAS (15815A0415), S.SUSHMA (14811A0461), T.MALLIKARJUN (14811A0469)** under my Guidance during year 2017–2018 and it has been found suitable for acceptance according to the requirements of the University.

PROJECT GUIDE

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ABSTRACT

Due to the rapid growth in population leads to severe waste in civic areas and generate pollution in neighboring areas. So this will humiliate the appraisal of affected area for reduction of garbage and maintain the environment greenery which requires a smart management system. Previously the waste is detected by using sensor systems through GSM/GPRS. To upgrade the cleanliness management system. A paper is proposed IOT based smart waste clean management system.

Cleanliness, the program which you want to be a part of your life, but it is the toughest thing to maintain. We think of keeping ourselves clean, our house clean, but only some of the persons think of keeping our locality clean. There comes the thought of our project to keep everything clean in a smart way. Our project will be useful in different places like home, on streets of villages and cities. The key issue in the waste management is that the garbage bin at public places gets overflowed well in advance before the commencement of the next cleaning process. It in turn leads to various hazards such as bad odor & ugliness to that place which may be the root cause for spread of various diseases. To avoid all such hazardous scenario and maintain public cleanliness and health this work is mounted on a smart garbage system. This project will help the government workers to intimate them about the level of the dustbin filled. Whenever the dust bin gets filled, it will intimate them with an IoT application so that they get to know when to clean the dust bin.

This project solar powered IoT garbage monitoring system is a very innovative system which will help to keep the cities clean. This system monitors the garbage bin and informs about the level of garbage collected in the garbage bin via third party ubidots web application. For this the system uses ultrasonic sensors placed over the bins to detect the garbage level and compare it with the garbage bin depth.

The main theme of the work is to develop a smart intelligent garbage alert system for a proper garbage management .This paper proposes a smart alert system for garbage clearance by giving an alert signal to the municipal web server for instant cleaning of dustbin with proper verification based on level of garbage filling.