

SAPTHAGIRI COLLEGE OF ENGINEERING


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Department of Computer Science and Engineering

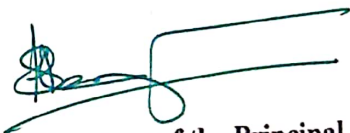


Certificate

Certified that the Project Work entitled **"GARBAGE MONITORING USING IOT WITH LOCATION TRACKING AND ALERT"** carried out by **KOMMINDALA APARNA (ISG14CS044)**, **KUNDHAVI NANDAKUMAR (ISG14CS048)**, **NAMITHA H (ISG14CS061)**, **PREKSHA R (ISG15CS411)**, bonafide students of Sapthagiri College of Engineering, in partial fulfillment for the award of **Bachelor of Engineering in Computer Science and Engineering** of **Visvesvaraya Technological University, Belagavi** during the academic year 2017-2018. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the department library. The project report has been approved as it satisfies the academic requirements in respect of **Project Work (10CS85)** prescribed for the said degree.

 12/06/18
Signature of the Guide
Abhishek K L
Assistant Professor

 12/06/18
Signature of the HOD
Dr. Yogish H K
Professor & Head


Signature of the Principal
Dr. Shivabasappa K L
Principal

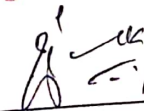
EXTERNAL EXAMINATION

Name of the Examiners

1. Dr. Yogish H K

2. Prof. Ranganatha. H R

Signature with Date

 14/06/18

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ABSTRACT

One of the major challenges faced by the world today is the growing amount of waste generated every day. Due to urbanization, population explosion and improper ways of garbage collection, garbage is being produced on a very large scale. Life-threatening diseases, reduction in the quality of aesthetics in the environment, air and water pollution are all resultant problems of unattended garbage mainly due to inefficiency in garbage collection. Thus, there is an urgent need of an efficient method for monitoring garbage. There are many available technologies which aim at effective collection of waste. In the proposed system, Internet of Things (IoT) has been used to manage smart bins that are employed to collect garbage and prevent it from overflowing. Arduino UNO microcontroller, ultrasonic sensor, Global Positioning System (GPS), Global System for Mobile Communication (GSM), and ESP8266 Wi-Fi module chip have been integrated into a system to implement smart bins.