VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama" Belagavi – 590 010



PROJECT REPORT ON

"Smart Dustbin: The Waste Segregation and Alert System"

Submitted in partial fulfillment of the requirements for the award of degree

BACHELOR OF ENGINEERING IN ELECTRONICS & COMMUNICATION ENGINEERING

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2018-2019

ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY **MOODBIDRI - 574 225**

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DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

CERTIFICATE

Certified that the project work entitled "Smart Dustbin: The Waste Segregation and Alert

System" is a bona fide work carried out by

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in partial fulfillment for the award of BACHELOR OF ENGINEERING in ELECTRONICS & COMMUNICATION ENGINEERING of the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI during the year 2018-2019. It is certified that corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The project report has been approved as it satisfies the academic requirements in respect of Project work prescribed for the Bachelor of Engineering Degree.

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ABSTRACT

Technology always helps mankind in making life easier. The prime need of a smart lifestyle begins with cleanliness and cleanliness begins with dustbin. Society will get its waste dispatched properly only if the dustbins are placed well and collected well. To properly manage the waste, it has to be handled, segregated, transported and disposed so that it reduces air pollution and also prevents spreading of diseases caused by unpicked waste.

A smart dustbin is designed to sort the trash into metallic waste, wet waste and dry waste. The waste is carried one by one using the conveyer belt and is fed into the main conveyer, where the waste is segregated using wireless sensors. Embedded technology is used to continuously monitor the status of the dustbin and to send an alert message automatically to the concerned authorities once the level of waste in the dustbin crosses the threshold as set by the authorities. It also guides the garbage-trucks to collect the garbage only from those areas where the bin is critically filled. This would save time and money of the authorities considerably.