

**VISVESVARAYATECHNOLOGICALUNIVERSITY**

**“JnanaSangama” Belagavi –590 018**



**PROJECT REPORT ON**

**“WIRELESS SURVEILLANCE ROBOT USING  
GSM AND RF TECHNOLOGY”**

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

**BACHELOR OF ENGINEERING  
IN  
ELECTRONICS & COMMUNICATION ENGINEERING**

**SubmittedBy**

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**USN  
4AL19EC011  
4AL19EC025  
4AL19EC029  
4AL19EC035**

**Under the Guidance of  
Mr. UDAYA KUMAR  
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**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING**

**ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY**

**A+, Accredited by NAAC & NBA (ECE &**

**CSE) MOODBIDRI – 574 225.**

**2022-2023**

# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

A+, Accredited by NAAC & NBA (ECE & CSE)

MOODBIDRI - 574 225

(Affiliated to VTU, BELAGAVI)

DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

## CERTIFICATE

Certified that the project work entitled "**WIRELESS SURVEILLANCE ROBOT USING GSM AND RF TECHNOLOGY**" is a bonafide work carried out by

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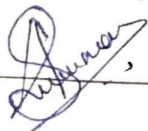
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in partial fulfillment for the award of BACHELOR OF ENGINEERING in **ELECTRONICS & COMMUNICATION ENGINEERING** of the **VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI** during the year 2022-2023. It is certified that all corrections/suggestions indicated 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.



Signature of the Guide

Mr. Udaya Kumar



H. O. D.

Dept. of Electronics & Communication  
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Dr. Siddesh G K

Signature of the H.O.D.

EXTERNAL VIVA



Signature of the Principal  
PRINCIPAL

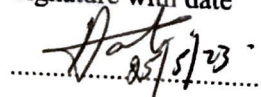
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Name of the Examiners

1. Harsha C. J

2. Dr. Siddesh G K

Signature with date



Siddesh 25/5/23

## **ABSTRACT**

This project aims to control motors using an Arduino Uno microcontroller, a DTMF module, and an ultrasonic sensor. The DTMF module provides a wireless control mechanism using a phone's keypad to send commands to the microcontroller. The ultrasonic sensor is used to detect obstacles and sends a signal to the microcontroller, which stops or changes the motor's direction to avoid the obstacle. The motor driver controls the motor's speed and direction based on the commands received from the microcontroller. The project provides a flexible and efficient way of controlling motors and has potential applications in robotics, home automation, and industrial automation. The system can be expanded to incorporate additional sensors and devices, making it suitable for a wide range of applications. Overall, the project provides an effective and practical solution for motor control using commonly available components, making it a cost-effective solution for various applications.