# VISVESVARAVA TECHNOLOGICAL UNIVERSITY "JNANA SANGANIA", BELGAUM-590014 KARNATARA



# "DESIGN OF INTELLIGENT SOLAR TRACKING ROBOT FOR SURVEILLANCE"

Submitted in partial fulfilment of the requirements of the award of degree

BACHIELOR OF ENGINEERING

IN

ELECTRICAL & ELECTRONICS ENGINEERING

#### SUBMITTED BY:

NAZMEEN KHANUM M 1SV19EE011 SULTANA KHANAM A 1SV19EE017

MALA G 1SV20EE400 SADDAM K 1SV20EE404

UNDER THE GUIDENCE:

Mrs.TANUJA K S M.E (Ph.D), MISTE

Asst. Prof. Dept of EEE



Sri Shridevi Charifable Trust (R.)

SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY (Recognized by Bort, of Kernotike, Affiliated to VTU, Balogard and Approved by AlGTE, New Galla). Skia Road, Turnskir ti-572-106. Karintaka | Websiter www.eduidexiergineering.org



2022-2023

PRINCIPAL SIET. TUMKUR

Scanned with ACE Scanner



Sri Shrulevi Charitable Trust (R.)

## DEVI INSTITUTE OF ENGINEERING & TECHNOLOGY ognimed by Bort, of Karcaleka, Affiliated to VIII, Belagev, and Approved by SIGTE, New Dath) Court, Transferrer, 572-106. Karastaka, (Websites vanna Grideniesky) mer bygod (



### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### CERTIFICATE

fis is to certify that the project work entitled "DESIGN OF INTELLIGENT SOLAR TRACKER DBOT FOR SURVEILLANCE" has been successfully carried out by NAZMEEN KHANUM M SV19EE011) SULTANA KHANAM A (ISV19EE017) MALA G (ISV20EE400) SADDAM K SV20EE404) the bonafide student of SHRIDEVI INSTITUTE OF ENGINEERING AND ECHNOLOGY, TUMKUR-572106, in partial fulfillment for the award of degree Bachelor of Engineering ELECTRICAL & ELECTRONICS ENGINEERING of the VISVESVARAYA TECHNOLOGICAL NIVERSITY JNANA SANGAMA, BELAGAVI-560014 during the year 2022-2023. All the corrections ggestions indicated for internal assessments have been incorporated in the report. The project work has en approved as it satisfies the academic requirements in respect to the technical seminar prescribed for the id Degree.

Signature of the Principal

Signature of the Guide

Irs. TANUJA K S ME(Ph.D), MISTE

Signature of the HOD

Mr. GHRAVIKUMAR M. Tech(Ph. D) Dr. NARENDRA VISHWANATH (Ph. D)

Asst.prof. Dept of EEE

HOD Dept of EEE

Principal

SIET, Tumkur-

SIET, Tumkur

SIET, Tumkur

#### **EXTERNAL VIVA**

Name of the Examiners:

1. 3 yede Arifunnila 2. Chuabai

Signature with date

Meh 24/5-21

Scanned with ACE Scanner

# **ABSTRACT**

Surveillance is increasingly becoming one of the most important subjects when it comes to security. In this work I have aimed to design a portable, economically viable alternative to manual surveillance that can find application in both civilian and military sectors. In this paper I have attempted to utilize the solar power for operation of robot for surveillance with an intelligent feedback. As powering the robots for surveillance is difficult this project provides a solar powered mobile microcontroller based surveillance platform which is an amicable solution to the problem. The project involves a PIC microcontroller, digital compass, H-bridge drivers and a automatic solar tracker setup. The functioning of the solar tracking system is independent of the robot movement. The project can be used as a multipurpose surveillance platform in both household and war field applications

