## VISVESVARAYA TECHNOLOGICAL UNIVERSITY "JNANA SANGAMA", BELGAVI-590018 KARNATAKA



Mini Project Report (18ECMP68)

ON
"Smart Blind Stick"

Submitted in partial fulfillment of the requirement for the award of degree BACHELOR OF ENGINEERING

IN

ELECTRONICS & COMMUNICATION ENGINEERING

Submitted by:

GAGANA V (USN: 1SV19EC011)

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#### **Under the Guidance of:**

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# DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

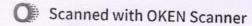
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Sira Road, Tumkur-572106

2021-2022

Dept of E&C SET, Tumkur-6

PRINCIPAL SIET., TUMAKURU.



### SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY

(Recognized by govt. of Karnataka, Affiliated to VTU, Belagavi and approved by AICTE, New Delhi) Sira Road, Tumkur-572106, Karnataka 2021-2022



### DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

### Certificate

This is to Certified that the mini project work (18ECMP68) entitled "SMART BLIND STICK" has been Successfully carried out by GAGANA V(USN: 1SV19EC011) ,HARSHITHA M (USN: 1SV19EC013), a bonafide students of Shridevi Institute of Engineering and Technology, Tumkur- 572106, in partial fulfillment for the award of Bachelor Of Engineering in Electronics & Communication Engineering of the Vishvesvaraya Technological University, Jnana Sangama, Belagavi -590018, during the academic year 2021-2022. It is certified that all corrections/suggestions indicated for internal assessments have been incorporated in the report. The mini project report has been approved as it satisfies the academic requirement with respect to the mini project work prescribed for the said Bachelor Of Engineering degree.

Signature of the g

Signature of the HOD

Signature of the principal

Prof. Ragavendra D Assistant professor Dept. of ECE., SIET Tumakuru

Prof. Aijaz Ahamed Sharief HOD Dept. of ECE., SIET Tumakuru

Dr. Narendra Viswanath Principal SIET, Tumakuru

#### EXTERNAL VIVA

Name of examiners:

Signature with date:

PRINCIPAL SIET. TUMAKURU



#### ABSTRACT

Blind person finds it difficult to detect the presence of any obstacles in their way while moving from one place to another and it is very difficult to find the exact location of the suck if it have been misplaced. Thus, the smart stick comes as a proposed solution to help the visually impaired people in their day to day living without the help of others. In this project we proposed a solution for the blind people by using an ultrasonic sensor in the blind stick. The instrument stands used to perceive the obstacles at the range of four meters and infrared instrument is castoff to perceive the nearer complications in front of the blind people. Thus the vibration motor helps the user to know there is some object in front, right and left of the smart stick. This proposed method uses the Arduino UNO as controller. The branch is accomplished of sensing all difficulties in front of the user. The smart stick is of user friendly, quick response, very low power consumption, lighter weight and it is easy to hold and fold by the user. The Smart stick also sends a message to the user if the stick is fallen from the user hands with the help of ADXL335

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