

Title of the Project: Smart Walking Stick for Blind using Arduino.

Name of the Students: Kevin Prince Jayaraj D, Karthikeyan S.

Register Number: 211417104119, 211417104110.

Name of the Guide: Mr. S.A.K Jainulabudeen, M.Tech.,

ABSTRACT

Obstacle detection is one of the major concerns for a fully or a partially blind person. This paper describes guide blind walking stick based on ultrasonic sensor with the use of Arduino Uno. According to World Health Organization (WHO), 30 million peoples are permanently blind and 285 billion peoples with vision impairment. In this paper discuss about smart guide blind stick, which is proficient of detecting any obstruction, detect corners and even allow the user to find the stick if anyhow missed by the user by pressing a remote switch. The device is designed with an objective to sort out common issues faced by the blind people while using conventional sticks. With the electronics embed within the stick, it became a smart stick. Presented here is a smart guide blind stick using Arduino. The stick uses Ultrasonic sensors for obstacle detection. The main aim of this paper is to detect nearby obstacle and notify the user of the direction of that obstacle, thereby enabling the user to determine the corrective direction to head.