

Blind Stick using Ultrasonic Sensor with Voice Announcement

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Abstract: God gifted sense of vision to the human being is an important aspect of our life. But there are some unfortunate people who lack the ability of visualizing things. The visually impaired have to face many challenges in their daily life. The problem gets worse when there is an obstacle in front of them. Blind stick is an innovative stick designed for visually disabled people for improved navigation. The paper presents a theoretical system concept to provide a smart ultrasonic aid for blind people. The system is intended to provide overall measures – Artificial vision and object detection. The aim of the overall system is to provide a low cost and efficient navigation aid for a visually impaired person who gets a sense of artificial vision by providing information about the environmental scenario of static and dynamic objects around them. Ultrasonic sensors are used to calculate distance of the obstacles around the blind person to guide the user towards the available path. Output is in the form of sequence of beep sound which the blind person can hear.

Keywords: ESP826612E, ATmega328, Thingspeak IOT, Energy Meter, Display.

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