

International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 1, March 2024

Smart Blind Stick

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Abstract: The Smart Blind Stick is a remarkable innovation designed to assist visually impaired individuals in navigating their surroundings with greater confidence. Leveraging the power of Arduino Uno and ultrasonic sensors, this smart stick detects obstacles and provides real-time feedback to the user. Visually impaired individuals face challenges in navigating their environment independently. To address this, we propose a Smart Blind Stick that enhances their mobility. The stick employs an Arduino Uno microcontroller and ultrasonic sensors to detect obstacles and provide timely alerts. When an obstacle is detected, the system activates a buzzer, allowing the user to adjust their path accordingly. Additionally, the stick incorporates a second ultrasonic sensor to detect pits or changes in ground level. By combining technology and practical design, this smart stick aims to empower visually impaired individuals and improve.

Keywords: Blind Stick, Arduino Uno, Ultrasonic Sensor, Obstacles detector

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DOI: 10.48175/568

