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IOT Based Smart Assistant System for Disabled Person

Tanishka R. Ghuge[1], Vishakha V. Khairnar[2], Neha N. Kshirsagar[3], Prerana N. Patil[4], Prof. V. A. Sonawane[5]
Department of Computer Engineering
Matoshri Aasarabai Polytechnic, Eklahare, Nashik Maharashtra, India

Abstract: *Blind people face significant challenges, including difficulty reading, recognizing objects, and navigating safely. According to WHO, 30 million are permanently blind, and 285 million have vision impairment. Visually impaired individuals struggle to detect obstacles, making walking dangerous. Special equipment like voice services and electronic sticks help improve their daily lives. This paper proposes a wearable system for blind people that uses a Raspberry Pi, webcam, and ultrasonic sensor to detect obstacles. The system provides audio feedback through earphones, alerting users to nearby objects. It aims to create a low-cost, compact solution for obstacle detection, offering a sense of artificial vision to help blind people navigate independently. The system uses Python and OpenCV for object detection, providing feedback through speech and warning sounds.*

Keywords: Ultrasonic Sensor, Rasp Pi, Object detection, pi Camera, Speech Output, Earphone

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