

ARTIFICIAL VISION FOR VISIONLESS PEOPLE USING MACHINE LEARNING

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Vision is one of the most important human senses for acquiring knowledge about the surrounding environment. The system is designed to provide autonomous navigation for the visually impaired people in both indoor and outdoor environment. The system is used to find the obstacle free path and to recognize objects. The system identifies the object and finds the distance of the object from user and provide as tactile and audio feedback to the user. The system consists of ultrasonic sensor, raspberry pi, GPS, GSM, camera and level sensor. The aim of the project is to provide efficient navigation and obstacle detection aid for blind which gives a sense of artificial vision by providing information about the environmental scenario of static and dynamic objects around them, so that they can walk independently.

