

COE 485: Senior Design Project (141)

Color Detector for Impaired People

Project Plan

Title

Color detector for the impaired people.

Problem Statement

The project help overcome challenges that visually impaired people face in daily basis from identifying clothing color to even appreciate art, by creating a way to detect colors through biofeedback. Blindness is the condition of poor visual perception. An estimation from World Health Organization state that 285 million people are visually impaired worldwide, 39 million are blind and 246 million have low vision.

Outcome

A wearable device that can help visually impaired people, to detect and identify colors by sending a biofeedback such as voltage signals, vibration, auditory pitches, pinboards, and reading pins.

Requirements

- Sensors to detect colors.
- Vibrators to provide feedback for visually impaired person.
- Control unit with a proper power source.
- Wearable device.
- Lightweight.

Advisor

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Team

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