Synopsis

**REAL TIME VISUALIZATION BOX**

**Problem Statement:** To Create Real Time Visualization Box (RTVB) For Blind People.

**Introduction:** RTVB is cheap, a simple friendly user, smart blind guidance system is designed and implemented to improve the mobility of both blind and visually impaired people in a specific area. The proposed work includes a wearable equipment consists of light weight sensor based obstacle detection circuit is developed to help the blind person to navigate alone safely and to avoid any obstacles that may been countered, whether fixed or mobile, to prevent any 16 possible accident.

**Technology Used:** Based on the impetus of the CNN, RTVB is a blind visualization system that helps blind people better explore the surrounding environment. By using YOLO algorithm and advanced wireless transmitter, the solution could perform accurate real time objective detection. A prototype for sensory substitution (vision to hearing) is established in the project. A portable and real time solution is provided in the work. They present a platform that utilizes portable cameras, fast HD video link and powerful server to generate 3D sounds.

**Block diagram:**

**Input Through**

**Camera**

**Ob**

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**t**

**Audio System**

**Raspberry pi**

**Processor**

**Camera**

**Image To Speech**

**Submitted by Guide**

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