

Title: A Smart Audio Assistant for Virtually Impaired using Computer Vision

Abstract

The present invention relates to a smart audio assistant device for virtually impaired using computer vision. The system integrates computer vision and IoT sensors that act as a smart virtual assistant to provide auditory information for all daily activities. For instance, if the person wants to cook something then he can ask the device for locating the kitchen tools and the device will locate those tools (using visual recognition and image capturing technology) and guide the user on how to use it through the entire process. The basic idea is to minimize the visually impaired individual's dependencies on others to perform their basic daily life activities like making coffee, cooking food, ironing clothes and many more. To make the daily activities and navigation easy for visually disabled and a device that can act as virtual assistant in reading the boards, texts, and assisting them through almost everything. Visually impaired individuals live a very dependent life which is not only a problem for them but also their family members. This device will not only help them with daily chores but also make them independent to a considerable level. The designed system will enable them to work like a normal person.