Develop a Smart White-Cane for Visually-Impaired People

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Abstract. We present sensor-based mobility assistive device for visually impaired people. The World Health Organization (WHO) reports that there are 285 million Visually Impaired People Around the World. Among them, there are 39 – billion who are completely blind. There are several Systems designed to help and improve visually impaired people Their quality of life. Unfortunately, many of these systems are limited in their capacity. In this paper, we present a comparative survey of wearable and portable assistive devices for Visually Handicapped people to show the progress of assistive technology for this group of people. We had 25 participants on the survey to understand their day-to-day life difficulties and how many existing devices are effective in their lives. Thus, the contribution of this literature survey is to discuss the most important aspects in detail the tools presented in the literature to support and highlight this population are: Advantages, disadvantages, and accuracy. We aim to design a device that ensures the safety and independent mobility to visually-impaired people.

Keywords: Assistive Devices, Visually-Impaired People Obstacle Detection