i-Walk – Smart Navigator System in indoor For Visually impaired people

V Bandaranayaka, DMR Kulasekara

Department of Computer Engineering, Faculty of Computing, General Sir John Kotelawala Defence University, Ratmalana, Sri Lanka

Abstract. 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's quality of life. Unfortunately, many of these systems are limited in their capacity. This paper presents a sensor-based mobility assistive device for visually impaired people. 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 visually impaired people. There were 25 participants in the survey, and that survey directed us to understand their day today life struggles, especially those they had to face indoors. And how much the currently using devices affect their lives to make it an easy comfortable one. The contribution of this literature survey is to discuss the most important aspects in detail. Our aim is to design a compatible smart cane that ensures visually impaired people throughout their lives

Keywords: Visually impaired, Sensors, wearable devices, portable assistive devices