

JSS Mahavidyapeetha
Sri Jayachamarajendra College of Engineering (SJCE), Mysuru – 570 006
An Autonomous Institute Affiliated to
Visvesvaraya Technological University, Belagavi



“SMART ASSIST FOR THE VISUALLY IMPAIRED”

Report submitted in partial fulfillment of curriculum prescribed for the
award of the degree of

BACHELOR OF ENGINEERING
IN
INSTRUMENTATION TECHNOLOGY
(Sponsored by Karnataka State Council for Science and Technology Student
Project Programme 38 Series)
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June 2015

ABSTRACT

A mobility assist designed to facilitate indoor navigation for the visually impaired, avoiding the use of Hoover cane and also provide information about the location of the user. This is done keeping in mind that the Hoover cane is the most traditional method used by the visually impaired for easy way finding. The technique uses auditory cues, such as sounds from the environment or those created artificially, to determine an individual's surrounding physical space for the purpose of navigation. For a visually impaired person, it is difficult to discern auditory cues in crowded areas; hence this work also aims to work in a noisy environment. Also, in case of any emergency (say the person goes missing), the device is provided with a GPS and GSM module which assists in providing the location of the user to the parent/Guardians or vice versa. The ultrasonic sensor used in this device eliminates the use of this Hoover cane/white stick thereby making it virtual. In case of a fire breakout the person may avoid the emergency by the fire sensors incorporated in the device.