

SMART SHOE

‘GPS ENHANCED SENSORY HEELS FOR THE VISUALLY CHALLENGED’

A PROJECT REPORT

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ABSTRACT

The smart shoe is designed with sensors all around the front end of the shoe. Three sensors are connected with two along the top front end and one in the left. The sensor in the front end of the shoe is set to detect the pot holes. With desired alignment of vibrators we can get the proper location of the obstacle. Vibrators connected to the microcontroller will start vibrating at the detection of an obstacle and the effect of vibration varies depending on the distance of the obstacle in the specific range. A single vibrator is used to add up to the simplicity and easier usage by the user.

The other feature of this gadget is that the user can get an approximate idea about the width of the object as the sensors are fitted in both the shoes. GPS is also interfaced with the controller to guide the person to his destination along with voice navigation. Apart from these features we have an alarm sound which is set to work simultaneously with the vibrator. An LCD display is provided to the user so that any passerby can help in case he wants to know his exact location.