

Smart Blind Stick

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Abstract: *Visually impaired people find difficulties detecting obstacles in front of them, during walking in the street, which makes it dangerous. The smart stick comes as a proposed solution to enable them to identify the world around. We propose a solution, represented in a smart stick with ultrasonic sensor to detect any other obstacles in front of the user, within a range of few meters. Moreover, another sensor is placed at the bottom of the stick for the sake of avoiding puddles. GSM messages (warning message), vibration motor & accelerometer are activated when any obstacle is detected. This proposed system uses the Arduino UNO, vibration motor, GSM messages (warning message), vibration motor & GPS etc. The stick is capable of detecting all obstacles in the range few meter during 39 m/s and gives a suitable respect message empowering blind to move twice his normal speed because she/he feels safe. The smart stick is of low cost, fast response, low power consumption, light weight and ability to fold.*

Keywords: Blind stick

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