Smart Glass and Alert System for Blind people

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Declaration

It is declared hereby that this thesis paper or any part of it has not been submitted to anywhere else for the award of any degree.

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Certification

This is to certify that this project entitled "**Smart Glass and Alert System for Blind People**" is done by the following students under my direct supervision. This project work has been carried out by them in the laboratories of the Department of Electrical and Electronic Engineering under the Faculty of Engineering, Sonargaon University (SU) in partial fulfillment of the requirements for the degree of Bachelor of Science in Electrical and Electronic Engineering.

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ABSTRACT

Blind mobility is one of the biggest problems that people with vision impairment face on a daily basis. The loss of their eyesight severely limits their quality of life and activities. They typically

long-term explorers may use stored memories or a blind navigation system to move about. The major goal of the current effort is to provide a strong, dependable, user-friendly, portable, low-power, low-cost solution for efficient navigation.

There are multiple smart accessories such as smart glasses, smart watches etc available in the market. There is a significant lack of technology to aid the physically challenged. We wanted to build something which is useful for the visually challenged people. So we designed low cost smart glass that can be useful for visually impaired people.

As stated in this study (Smart Glasses for Blind People), the intended audience is those who are visually handicapped. This device includes a pair of glasses and an obstacle detection module fitted in it in the center, a processing unit, an output device i.e. a beeping component, and a power supply. The Obstacle detection module and the output device is connected to the processing unit. The power supply is used to supply power to the central processing unit. The obstacle detection module basically consists of a ultrasonic sensor, processing unit consist of a control module and the output unit consists of a buzzer. The control unit controls the ultrasonic sensors and get the information of the obstacle present in front of the man and processes the information and sends the output through the buzzer accordingly. These Ultrasonic Smart Glasses for Blind people is a portable device, easy to use, light weight, user friendly and cheap in price. These glasses could easily guide the blind people and help them avoid obstacles.

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