

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY
BELGAUM**



Head Movement Based Voice Enabled Device For Physically Challenged People

*A report submitted in partial fulfillment for the requirement for
the degree of*

**Bachelor of Engineering
in
ELECTRONICS AND COMMUNICATION**

**By
R. Sujatha (2bv09ec076)
Sujata Uppar (2bv09ec106)
Poonam R Jadi (2bv10ec407)
Akshata Kale (2bv08ec400)**

Under the guidance of
Prof. Rajashekar B. Shettar



**B. V. Bhoomaraddi College of Engineering & Technology, Hubli, India.
(An Autonomous Institution affiliated to VTU, Belgaum)**

Academic year 2012-2013

**Sponsored by Karnataka State Council for Science and Technology,
Bangalore.**

Abstract

As we know that in today's life automation is developing in every field. To grow life in faster manner automation plays an important role. With respect to automation a simple and effective device is developed towards the disabled persons. Nowadays disabled persons are facing many problems as they need a person to manually to do their work. It is also not possible for the care taker to be with them all the time. The concept behind this project is to develop a head movement controller that can be easily controlled by the disabled person. This application includes MEMS accelerometer which is placed on the head of the disabled person and depending on the movements made the basic needs are announced and displayed. Our module will obtain signals from the MEMS accelerometer which directs the movement of the head. The main aim of the project is to design and construct a head movement controlled device switching system for physically challenged. The user can wear this device on head and with simple head movements he can request for the basic needs like water, food or medicine. User can also control electrical devices like fan, light etc. with the help of head movements.