



ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ - ಬೆಳಗಾವಿ
VISVESVARAYA TECHNOLOGICAL UNIVERSITY - Belgaum



PROJECT REPORT ON
"VOICE ACTIVATED WHEEL CHAIR FOR DISABLED"

Submitted in the partial fulfillment of the requirements for the award of the Degree

Bachelor of Engineering in Electronics & Communication

by

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Abstract

The main objective of the project to help the disabled, who will not able to walk. The wheel chair can take commands from the person's voice and move the wheel chair on that particular direction.

Quadriplegics are people who are permanently unable to move any of the arms or legs, as their spine will be injured. So it is not practical to work on pushing a chair. To minimize this problem, voice activated wheel chair are the best options for personal mobility. Steering is done through key pad in a possible location that a person can reach. The speech-recognition control system can be used by quadriplegics to control their wheelchair a throat microphone picks up the vibrations of the vocal cords when the user speaks the commands. In some cases a headset microphone can also be used. Throat microphone is used to pick up commands. The speech-recognition system adapts to any language. Even if someone has difficulty pronouncing words, the wheelchair will adapt to recognize distinct sounds. The wheelchair can be driven with only 5 commands. The commands are combined to emulate the movements of a key pad.

The non-voice inputs such as coughing and breathing and spark-like mechanical noise should be rejected and that the system must recognize speech commands affected by disability, including specific pronunciation speed and frequency, to achieve a system that can operate powered wheelchairs safely using a severely disabled person's voice in a real environment.