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# Quadriplegics Wheelchair Control by Head Motion Using Accelerometer

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**Abstract:** The problems faced by paralyzed and handicapped people are many among which they can't move any of their body parts except head. Quadriplegics are persons who are not able to move any of the body parts. This may be due to age, stroke, arthritis, high blood pressure, paralysis and birth defects. The patients with such disabilities are not able to perform their everyday actions such as feeding, toilette usage and movement through space. The patients with such serious incapacities can't play out their ordinary activities, for example, taking care of, and development through space. This robotic wheelchair project aims at designing a wheelchair that will work crucial one is independent mobility. They need external help from other people to execute and perform their daily activities. Electric and advanced wheelchairs are manufactured and designed with an aim to aid paraplegics. But such electric wheelchairs cannot run by patients having high range of impairment like persons who cannot on the basis of head movement of the patient. For normal movement of wheelchair we use hand force. In this project we are using head movement for controlling the wheelchair motion. In this project 2 DC motors used for moving forward, backward and left and right. They are placed on the frame. According tote head movement the wheelchair will move as per directions given by user.

**Keywords:** Quadriplegics

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