

## **NOVEL WHEEL CHAIR FOR PHYSICALLY CHALLENGED USING IOT**

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### **ABSTRACT**

*Great people like Stephen Hawking and Max Brito have been suffering from this crippling phenomenon. Our project is an attempt to make lives of the physically challenged people by our extravagant project. We mean self-reliant, which will thereby reinstate their confidence and their happiness. The idea is to create an Eye Monitored System which allows movement of the patient's wheelchair depending on the eye movements. We know that a person suffering from quadriplegia can partially move his eyes and tilt his head, thus presenting an opportunity for detecting those movements. We have created a device where a patient sitting on the Wheel Chair assembly looking directly at the camera, is able to move in a direction just by looking in that direction. The camera signals are monitored by a MATLAB script, which will then guide the motors wired to the AtMega1284P Microcontroller over the Serial Interface to move in a particular direction. The system is cost effective and thus can be used by patients spread over a large economy range. We have implement a Smart mobile application to paramount our project and thereby we justify our project name "The Smart Mobility For Physically Challenged"*

**KEYWORDS:** *IoT, Hardware, Software and Artificial Intelligence*

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### **Article History**

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