ABSTRACT

The exoskeletal arm is used for the rescue operation in high altitude mountain disaster in which the people have a less oxygen level and even though the rescuers have trained for the high altitude the human body have certain limits So, our project focus on the rescuers ability to move and heavy objects during the disaster time. The rescuers have small times in the area which makes them more tension at the time of rescue so our projects helps them to do it more easy way.

In our project we have shoulder pin, elbow pin and a wrist pin and each of the pin is supported by four pistons, four from shoulder and elbow pin and another four from the elbow to the wrist pin.

The main principle we use here is magnetic levitation, a sensor is fitted in the piston and when the sensor detect the pressure the chip will analyze the pressure and the chips converts the current according to the pressure and the electromagnetic will change its polarity and acts accordingly. And the psitons acts and it will pull or push.