4. Design and Fabrication of a Low Cost Assistive Leg Exoskeleton:

This system was developed for assisting motion of human leg. It had an IMU to measure the angle of the limb requiring assistance. The system was trained using the data obtained from the IMU. The assisting effort was delivered using stepper motors and a supporting structure for the affected limb.



Fig: Design of a Portion of Leg Exoskeleton.

Fig: Angle Measurement of Leg Movement

The exoskeleton had to be trained in order to execute its assistive operations. Hence angle data was obtained from the IMU.

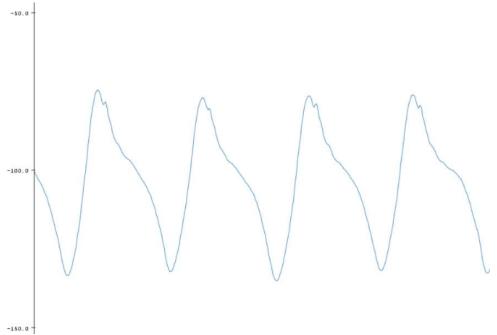


Fig: Angular position data acquired from IMU.



Fig: Leg Exoskeleton Parts.