Hongwu Wang, Mustafa Ghazi, Raghuveer Chandrashekhar, Madeleine, and Sarah Brown University of Oklahoma Health Sciences Center

contact: <u>Mustafa-Ghazi@ouhsc.edu</u>

Wheelchair Mounted Robotic Arm

Many users of powered wheelchairs have difficulty in reaching out and using their hands or arms for performing various daily-life activities. One solution to this problem is to use a robotic arm mounted on a powered wheelchair. Such an arm can be controlled by using a joystick and make life easier, for example in picking objects off of the floor. This project uses a JACO robot arm (with 7 degrees-of-freedom mounted on a power wheelchair). This setup is being used for conducting research on wheelchair mounted robotic arms for adult users as well as children.