

Experiments for EE324: Control Systems Lab

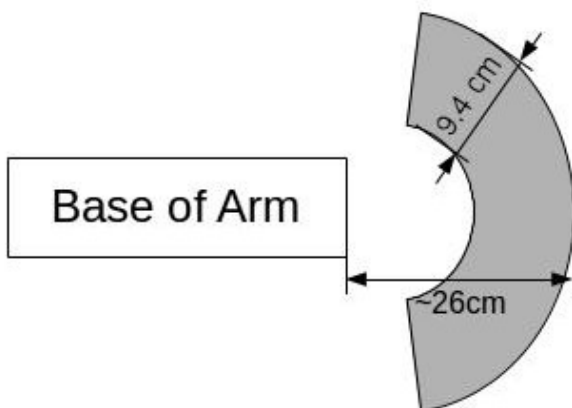
4. Pick and place using Robotic Gripper arm and Image processing

Target:

Set up Arduino to be able to move robotic arm in any direction allowed. Calibrate using initial condition so that some information about position of arm is known. For example how far away from table is the robotic arm, based on angle rotated w.r.t. original position as reference. Basic code for servo motors is provided.

Use the given elementary MATLAB image processing file, add serial communication code to it to communicate with arduino board and add logic so as to be able to pick and place objects anywhere in the given annular region as shown in Fig 1. (shaded region). **Please get TAs to check connections before powering on the machine.**

Figure 1



Top View

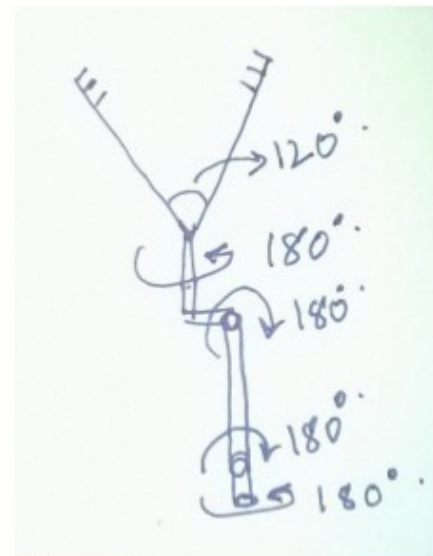


Figure 2