

OpenGL – Robot

In this homework, you are required to draw the robot with upper arm, lower arm and two fingers. (Please refer to the transformation homework.)

The requirement is different for graduate students and undergrads.

Undergrads: Please draw the upper arm, use any color you want. Click the 'S' key, the upper arm can rotate around the shoulder. Release the 'S' key, stop rotating.

Graduate students: Besides the undergrads part, you also need to draw the lower arm. Click the 'E' key, the lower arm can rotate around the elbow. Release 'E' key, stop rotating.

Students want challenge: Add the two fingers. Click the 'C' key, close the fingers slowly, and click the 'O' key, open the fingers slowly. Set up the maximum opening angle you want. (Extra 10 pts)

All students need to set up the perspective frustum, camera position for the viewing matrix.

Take screen shots, and put them into your report. Please zip your cpp file, shader files, and the report with your output and submit it. Please do not submit the whole package and do not submit your executable files.