

Assignment 3, EECS 397/600: DARPA Robotics Challenge **due by 5pm, Tuesday, 23 September**

1) Pick up a drill:

Launch Gazebo with these commands:

(in one terminal): `roslaunch hku_worlds drc_practice_task_6.launch`

(in a second terminal): `roslaunch fc_bringup sim_task_6.launch` (really, this is identical to `sim_task_4`)

(in a third terminal): `roslaunch sim_controller USER`

You should see Atlas standing in front of a table with a drill.

Write a *.traj script (e.g. `drill_grab.traj`) to grab and lift the drill. If necessary, you can reposition Atlas or the drill (via Gazebo, in left panel, expand “Models”, select “drill”. From top menu, select icon that looks like up/down/right/left. Red, green and blue axes will appear from the drill. Hover over the green axis; it will become bolder. Then click/drag to slide the drill closer to Atlas. You can do the same with Atlas himself).

Execute your program (in another window, assuming you have navigated to the directory containing your trajectory file) with:

```
roslaunch play_file play_file drill_grab.traj
```

Make a movie of your result and upload it with your assignment solution.

2) Compose an interesting playfile:

Do something fun/interesting. Make a movie of your result. Upload your movie as well as your trajectory file.