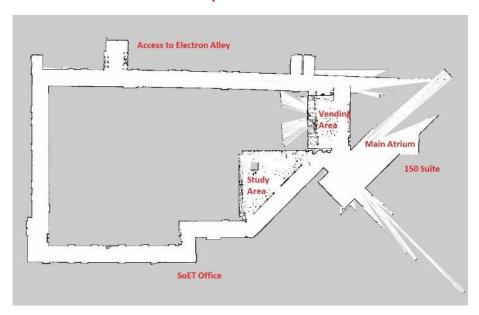


In Python (or C if preferred):

- 1. Several maps have been provided on the website. KNOY_Speedway is the main race course. KNOY_DemoTrack is the triangle in the main atrium around the elevator. Load the test map from website, with waypoints, and use amcl and your local controllers to follow the waypoints around the course, transferring to the next waypoint, as appropriate. To get maximum points, you must read the IMU and interpolate the car's position between AMCL updates. Turn on the IMU data with the serial command: IMU1. Should you want to turn off the IMU data, use command IMU0. (Probably not necessary, but you will have to continuously read the serial input data to prevent a buffer overflow.)
- 2. Bonus points for using move_base and the navigation stack (check the ROS wiki) or for implementing obstacle avoidance for head-to-head racing using a webcam or other sensor information.

To read the serial data from the IMU, see IMU serial description

Practice in the morning, as needed. Time Trials begin at 11:00 am. Each team gets three official attempts at best time



Updated: Nov. 27, 2017