

Final Race Lab

Team: Virtual Fast and Keyboard Furious

In the final race, we followed three directions to get the best result.

1. Wall-following (center) and Pure Pursuit tracking with PF odometry
2. RRT based waypoint generation and Pure Pursuit tracking with PF odometry
3. Manual generated waypoints, heuristics in Pure Pursuit tracking with PF odometry

As listed above we get an average lap timings as follows:

1. 90s with zero collisions [Wall-following (center) and Pure Pursuit tracking with PF odometry]
2. 40s with 1-2 collisions [Manual generated waypoints, heuristics in Pure Pursuit tracking with PF odometry]
- 3.

1. Wall-Following and Pure Pursuit Control tracking with Particle Filter:

- a. We started with the skeleton code of Pure Pursuit and builded up on that.

2. Manual generated waypoints, heuristics in Pure Pursuit tracking with PF odometry

3. RRT based waypoint generation and Pure Pursuit tracking with PF odometry