

Robotics

Assignment 2: Mighty Thymio

Sumeet Gyanchandani, Bart van der Vecht

1 Instruction for running the code

For running the code please use the following command.

```
roslaunch controller.py <thymio-name>
```

Note: Task 2 and 3 are commented in the main function of the code. Please uncomment these tasks in order to run them.

2 Compulsory Tasks

- Task 1: Implemented
- Task 2: Implemented
- Task 3: Implemented

No puzzling behavior noticed. No substantial problem encountered.

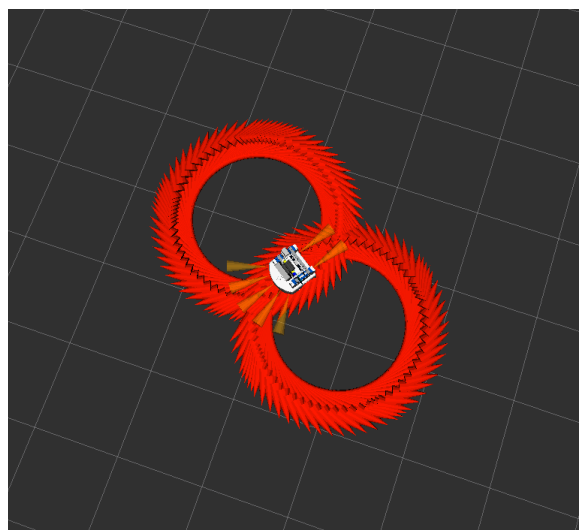


Figure 1. Odometry Visualization Trace for Task 1

2.1 Optional Tasks

- Task 4: Implemented
- Task 5: Implemented

The overall speed of the robot was slower in the real world, hence we had to multiply the time duration of the rotation by a factor of **2.3**. No substantial problem encountered.

Following are the youtube videos for the tasks:

Entire Playlist: <https://www.youtube.com/playlist?list=PLGfmBRMgMp43Axx8DaQA-sUZ0aRARWW0m>

Individual Videos:

Eight trajectory: <https://youtu.be/gevJ8tW0Rq0>

White wall: <https://youtu.be/XeZCLe5Xkhw>

Black wall: <https://youtu.be/Yqcc7Za1eSw>

Half black and half white wall: <https://youtu.be/9bkXcwj5WaE>