# **STATUS REPORT - Your Name**

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Status Update Period	Week of 01/20/23
Professor	Dr. Dorothy Wang

## Accomplishments for the week of (01/15/23-01/20/23)

- Came up with our timeline and questions about project.
  - o Split into Theoretical work and controller estimator design before spring break.
  - o Then navigation and algorithm work after spring break.
- Planned meeting dates and times, approximate 3x meetings a week.
- Found the classroom and ensured swipe access.
- Set up group GitHub, Google Doc, and Obsidian for collaboration.
- Came up with topics to research from our timeline.
  - o Ex. Control Theory, Estimators, ROS
  - o Completed basic research on the Linux command line and feedback loops.
  - o Beginning sensor research, starting with measurables from each sensor.
- Set up and installed Ubuntu and ROS on Raspberry PI.
- Set up and confirmed ability to make a remote connection to Raspberry PI.
- Checked out a PI hat, a car skeleton, and a lidar sensor.

#### Plan for next week (01/21/23-01/27/23)

- Keep modeling the PI car with state space models, hope to complete this by next week.
- Designing system ID experiments for the motor, need to work on this synchronously to the modeling to be able to complete the state space models.
- Investigating ROS, understanding what syntax we will need to be familiar with and gain a better understanding for how the program works.
- Begin simulations on the PI car, hoping to begin this near the end of next week, as we complete the state space models.

### Topic Outline/ Progress toward deliverables

I. Finish modeling the Pi car with state space models
II. Start simulation on the Pi car
Scheduled to complete by 01/26/23
Scheduled to complete by 01/27/23

III. Start investigating ROS Scheduled to complete by 01/25/23

#### **Issues**

None yet <sup>©</sup>