Principles of Robot Autonomy I

Section Logistics





Goals

- Provide hands-on experience for working with
 - 1. Hardware
 - 2. ROS2
 - 3. Software Development Workflows

Logistics

- Sections will be a combination of mini lectures and hands-on activities.
 - Mini lectures are made up of a minimal slide deck and live demos relevant to your hands-on activities.
- Done in groups of 3 4 people.
- CAs will come check with each group for each checkpoint.

Do I have to stay the whole time?

- Once you complete the activities and have all checkpoints verified by the CA, you are then free to leave.
- It would be highly appreciated if you can stick around and help out the other groups. This creates a great community!

Do I have to arrive on time?

- **YES.** Mini lectures during sections will contain crucial information for the hands-on activities.
- Section slides and the activity handout will be posted online, but live demos from mini lecture may not be recorded.
- We will not stay after hours.
- Consistently showing up late will impact your attendance grades.

Grading

- Allow to miss one section without grading penalty
- (24%) Section x 8
 - (2%) Attendance
 - (1%) Group Participation -- through peer evaluation at the end
- (16%) Final Section Demo
 - (4%) Code Style
 - (8%) Autonomy Stack Functionality
 - (4%) CA Q&A

Questions about Section Logistics?

Principles of Robot Autonomy I

Section 1: Introduction to UNIX, Git, and Python3





UNIX

• Take full control of your computer through terminal.

Git

- Track your software development.
- Say goodbye to
 - •pose controller.py
 - •pose controller v2.py
 - pose_controller_v2_broken.py
 - •pose controller v3 working.py

Executable in UNIX

• A.k.a. .exe for Windows

Python3 Debugging Tips

- ipdb
- IPython