

EN605.613 Introduction to Robotics

Name:

Assignment 1. Student Information Sheet & Setting up a ROS environment.

Student Survey

1. What programming languages are you proficient in? (e.g. Python2, MATLAB, C++, etc.)
 - a. C++, C, MATLAB, Python
2. How would you rate your proficiency level in the following subjects?
 - a. Linux OS
 - i. Moderate-to-Good
 - b. Linear Algebra
 - i. Good
 - c. Calculus
 - i. Good
 - d. Physics
 - i. Moderate-to-Good
3. What are you looking to get out of this course?
 - a. I have largely have gotten experience in robotics through work or adjacently related courses in Undergrad. I would like to get some formal training into robotics and learn foundational knowledge to explore each topic individually. I have largely worked in controls/planning and perception. So, I would like to get more incite to the other topics.
4. Which topics listed on the class syllabus are the most interesting to you?
 - a. I am most interested in learning more in Continuous Planning and SLAM. I have had little exposure to SLAM in my experience so far.

Setting up ROS

Following the instructions in the ROS Setup Handout install ROS2 and the Turtlebot3 simulation on your machine. Then complete the following.

1. Document your system setup (Host OS, VM or Docker)
 - a. Machine type (Desktop, Laptop, Cloud Virtual Machine)
 - i. Desktop (Linux) and Laptop (Mac)
 - b. Host Operating system (Windows, Linux, Mac)
 - i. Linux and Mac
 - c. ROS install type (Local, Virtual Machine, Docker)
 - i. Local and Docker
2. On a scale of 1-5 how difficult did you find the installation process (1 is easy, 5 is hard)?

a. 2

3. Drive the robot to the opposite side of the obstacle field. Paste a screenshot below.

