COMP.4510/COMP.5490 Mobile Robotics

Fall 2018

Prof. Yanco

**Assignment 0: ROS Tutorials**

Out: Thursday, 6 September 2018

Due: Thursday, 13 September 2018, with files submitted before class

***Preparation:***

You may want to look over the ROS slides form last class as well, particularly for CMakeLists.txt setup.

**What to do:**

1. Do the Core ROS Tutorials (<http://wiki.ros.org/ROS/Tutorials>) 1-17.
   1. Make sure you do **both** the C/C++ **and** Python versions of the publisher/subscriber tutorial (don’t worry if you are not familiar with Python; we just want you to get a basic into to that language).
2. Do the rviz Text-based Tutorials (<http://wiki.ros.org/rviz/Tutorials>) 1-10.

***How to Get Help:***

Email [jkuczyns@cs.uml.edu](mailto:emcann@cs.uml.edu) if you need assistance on this assignment.

***What To Turn In:***

A zip file containing the following:

1. A README file containing
   1. Your name and email address
   2. Instructions for the grader on how to run it.
   3. Answer the following questions *(you may use Google to help solve these)*:
      1. How much memory is your vLabs VM allocated?
      2. How many CPUs is your vLabs VM allocated?
      3. How much disk space is your vLabs VM allocated
   4. A detailed description of any problems that you were not able to fix, and a hypothesis on what is most likely causing them. *You will* ***not*** *be deducted points for disclosing errors which would otherwise not have been detected. This is merely to help the grader diagnose any major problems, so they can give you the maximum partial credit.*
2. A ROS package containing *(these two don’t have to be “your own work”, since you’ll copy/paste from the site; however, feel free to experiment)*:
   1. Your solutions from the publisher/subscriber tutorial (both C++ AND Python versions)
   2. Your solutions from he message/service tutorial
3. The bag file from Core ROS Tutorial 17.
4. Your default rviz configuration file, renamed to ```DOTrviz```. (You’ll find it as a hidden file: “~/.rviz”)

(from your src folder: *zip –r yourname\_ps0.zip your\_dir*)

Copy the zip to your homedir on mercury.cs.uml.edu, then submit it with:

**submit jkuczyns hw0** *yourname\_ps0.zip*