

Object Recognition and Path Smoothing Robot

Problem Statement

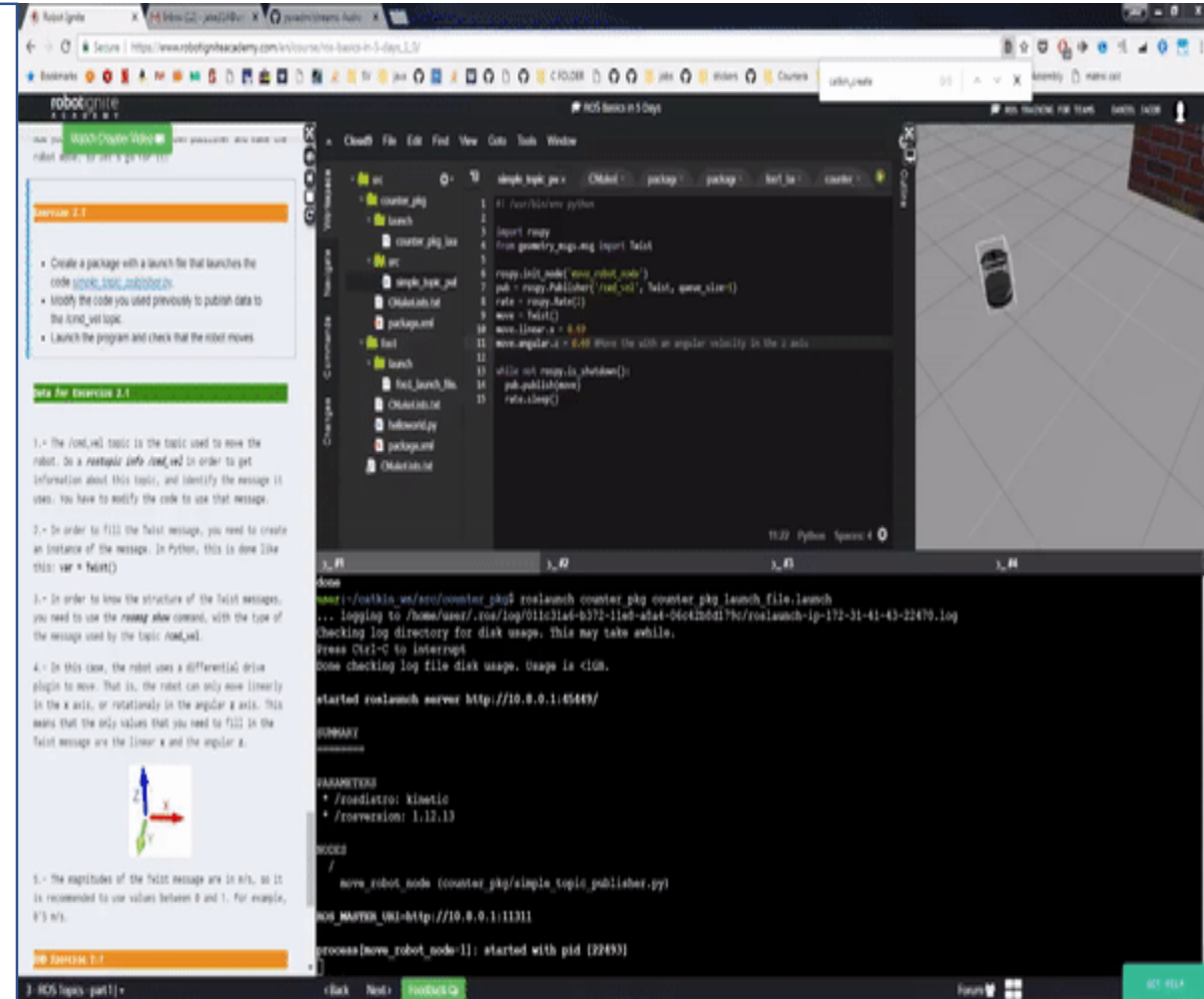
To provide a tool for Dr. McCourt to test his research in analyzing, designing and implementing a complex systems in presence of uncertainty.

Product Cycle

1. Get the Turtlebot Burger to be controllable with an Xbox 360 controller and a wireless keyboard.
2. Getting sensors provided by Dr. McCourt to send and receive positioning data back and forth. Four sensors located in a room and one located on the Burgerbot.
3. Getting the webcam provided by Dr. McCourt to work with OpenCV and SLAM.
4. Using real-time object detection using deep learning and OpenCV. This will require networking (probably).

Deliverables

1. Produce a robot that be controlled with an Xbox Controller and Keyboard that can be used for Dr. McCourts Research.
2. Have that same robot be able to detect objects using deep learning and OpenCV.



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