PDE4430 – Mobile Robotics

Middlesex University Dubai

Introduction

- To get an introduction about the rationale and design of ROS look at this page, and the four pages linked to from it: http://wiki.ros.org/ROS/Introduction

- To start using ROS look at the tutorials: http://wiki.ros.org/ROS/Tutorials

- A Gentle Introduction to ROS is a free book that provides a good intro to the features of ROS: https://www.cse.sc.edu/~jokane/agitr/

- ROSCON is the annual ROS developers conference - the presentations are recorded, and slides are available. Change the year at the end of the URL to see previous years.

First Steps

Step 1: Create a catkin workspace

This is the first step to use ROS.
http://wiki.ros.org/catkin/Tutorials/create_a_workspace

Step 2: Create a ROS package

A ROS package is usually your own program, which you want to compile in the ROS environment.
http://wiki.ros.org/catkin/Tutorials/CreatingPackage

Step 3: Create simple publisher and subscriber packages (using Python)

These are the first two meaningful packages you'll create – One is to publish a topic while the other is to subscribe it. Have fun!
http://wiki.ros.org/ROS/Tutorials/WritingPublisherSubscriber%28python%29