Introduction to Robotics

CSCI/ATRI 4530/6530

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A quick recap

ROS - Setup

Create a ROS workspace

```
mkdir -p ~/catkin_ws/src
cd ~/catkin_ws
catkin_make
```

Add the workspace to the ROS system (path)

```
sudo gedit ~/.bashrc (add the below command at the end)
source ~/catkin_ws/devel/setup.bash
```

Create a ROS package and build the workspace again

```
cd ~/catkin_ws/src
catkin_create_pkg example_pkg roscpp rospy std_msgs
cd ~/catkin_ws
catkin_make
```

ROS - Homework

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- If curious, go through the tutorials on understanding ROS nodes and topics

Announcements

Next class - Thursday 08/23/2018

- Monday 27th - Guest Lecture by Prof. Prashant Doshi (Sensors model - Rangefinders)
- Announcement of Assignment 1 - 09/03 Monday (Holiday - no class)
- Deadline for Assignment 1 - 09/10 (noon)
- Course schedule (tentative) uploaded in the #schedule channel of slack and eLC.

For next class

Next class - Thursday 08/23/2018

- Probability theory basics

For today - Kinematics

Kinematics - Basics

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- Coordinate transformation - inertial/world (non-moving), body-fixed (moving)

Kinematics - Wheeled robot

See the attached slides from EdX