

CS 378: Autonomous Intelligent Robotics

Instructor: Jivko Sinapov

<http://www.cs.utexas.edu/~jsinapov/teaching/cs378/>

Readings for this week

Maruyama, Shin, et al. "Change occurs when body meets environment: An essay on the embodied nature of development." (2015)

ROS Tutorials (1.1)

<http://wiki.ros.org/ROS/Tutorials>

Announcements

FRI Summer Research Fellowships:

<https://cns.utexas.edu/fri/beyond-the-freshman-lab/fellowships>

Applications are due March 1st but apply now!

Funding is available for 4-5 students per FRI stream

Announcements

Homework 1 is due today!

Submit on canvas AND through email to TA

Homework 2 is out – more information at the end of class

In the news...

Mashable

[AdChoices](#) [Robot Robots](#) [Robot Store](#) [Humanoid Robot](#) [Robot Future](#)

Robots, not humans, will serve you at SoftBank's new store in Japan

1.1k

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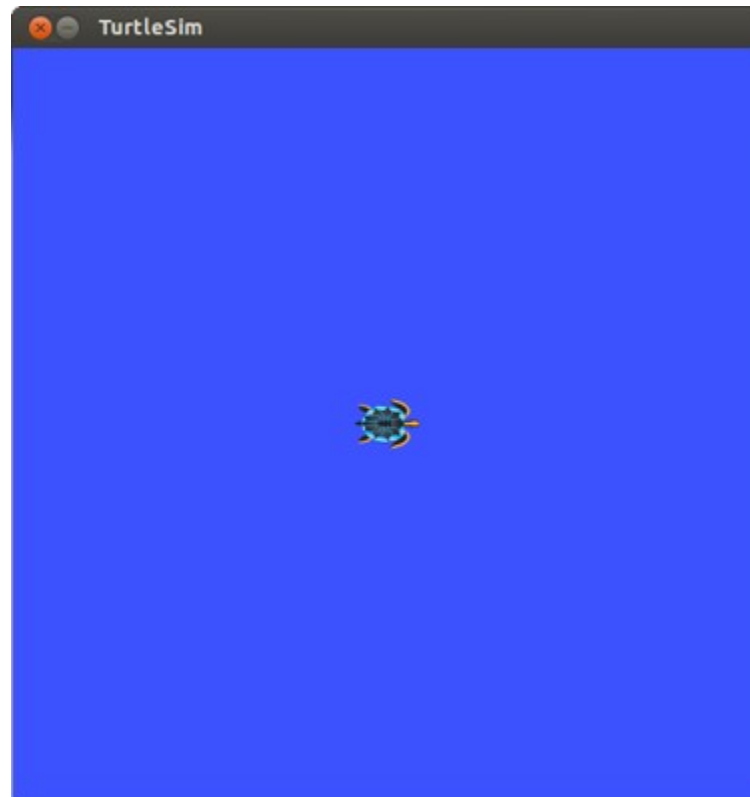


IMAGE: HITOSHI YAMADA, NIPPON PHOTO ASSOCIATED PRESS

Today

- 1) Understanding ROS topics using turtlesim
- 2) Writing our first ROS node

Turtlesim



Understanding topics

rostopic list : list all available topics

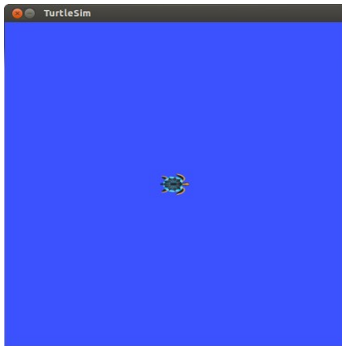
rostopic info <topic_name> : display information about a given topic

rostopic hz <topic_name> : display the frequency with which messages are published to a

rqt_graph : a utility to visualize the ROS node graph

Turtlesim

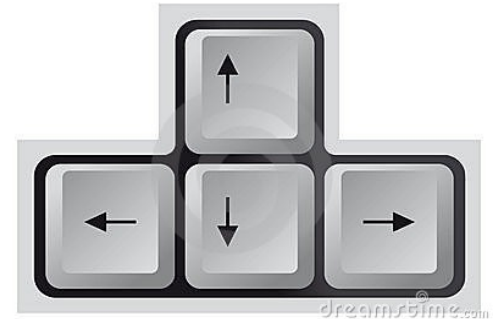
turtlesim_node



/turtle1/cmd_vel



turtle_teleop_key



Writing our first ROS node...

Step 1: create a catkin workspace and build it

Step 2: in the workspace, create a ROS package

Step 3: in the package, write the code for the ROS node

THE END