Week 2 - ROS, TurtleBot & MatLab (7/2)

In week 2 we will:

* Go over the Robot Operating System (ROS1), covering the main concepts: nodes, topics, publishers/subscribers etc.

Thereafter, you will:

* Follow a tutorial to get the Turtlebot up an running (inkl. setting up the connection between your laptop and the robot).
* Follow instructions to connect to the Turtlebot through Matlab.
* Do the exercise for this week.

Reading Materials:

* "ROS: an open-source Robot Operating System", [icraoss09-ROS.pdf](https://brightspace.au.dk/content/enforced/126849-LR29944/csfiles/home_dir/ROS/icraoss09-ROS.pdf)
* [What is ROS (short description)](https://www.youtube.com/watch?v=UL1_Ue4rUWs)
* [The Basics of ROS Applied to Self-Driving Cars](https://www.youtube.com/watch?v=J1qT85pTW0w)
* <https://www.turtlebot.com/turtlebot3/>
* Working with ROS and Matlab
  + MatLab - Exchange Data with ROS Publishers and Subscribers    <https://se.mathworks.com/help/robotics/examples/exchange-data-with-ros-publishers-and-subscribers.html>
  + MatLab - Work with Basic ROS Messages <https://se.mathworks.com/help/robotics/examples/work-with-basic-ros-messages.html>
  + MatLab - Work with Specialized ROS Messages <https://se.mathworks.com/help/robotics/examples/work-with-specialized-ros-messages.html>

As info (exercise is based on these items):

* [MatLab - Get started with ROS](https://se.mathworks.com/help/robotics/examples/get-started-with-ros.html)
* [MatLab - Connect to ROS Network](https://se.mathworks.com/help/robotics/examples/connect-to-a-ros-network.html)