Dear all,

I am looking forward to show you guys some interesting UAV simulation stuff in Gazebo, and hopefully you will all end up with some nice tools.

The agenda for the lecture

- Talk about UAV Simulation using ROS and Gazebo
- Demonstrations of UAV Simulation (Live, video, etc.)
- Get your own simulation environment up-and-running on your own laptops
- Hands-on assignments

Pre-requisites for lecture is to have Ubuntu 16.04 with ROS Kinect on your laptop. This guide describes how to prepare your laptop with Ubuntu 16.04 and ROS Kinetic.

Installing Ubuntu Desktop 16.04
You can download the latest stable build from the official Ubuntu mirrors (either 32bit or 64bit) ISO images from http://releases.ubuntu.com/16.04/.

Alternative
You either install Ubuntu 16.04 alongside your current OS or install it in a virtual box.

Installing ROS Kinetic
Follow the installation instructions on http://wiki.ros.org/kinetic/Installation/Ubuntu

If you are not familiar or a little rusty with ROS, please go through the ROS Tutorials. I don't expect you to be an expert in ROS, but it will be helpful if you know the basic concepts and common commands, and have created a catkin workspace.

Prepare MAVROS
Binary installation:

sudo apt-get install ros-kinetic-mavlink

Clone MAVROS repo's into your catkin workspace:

git clone https://github.com/mavlink/mavros
git clone https://github.com/ros-controls/control_toolbox
git clone https://github.com/ros-controls/realtime_tools

and build.

Installing QGroundControl
Download the QGroundControl `AppImage from:`
https://donlakeflyer.gitbooks.io/qgroundcontrol-user-guide/content/download_and_install.html
and follow the instruction for running it on Linux.