

# x2go instructions for EECS 106A

## WARNING ABOUT HARDWARE

x2go allows you to remotely log into our real lab computers, which are networked with our physical robots (Baxter, TurtleBots, etc.). **Please do not attempt to control lab hardware unless you are physically in 111 Cory watching the hardware you are using and have been properly instructed in its use.** This is extremely important for the safety of both our lab hardware and other students. We the EECS 106A staff are trusting you to responsibly use this remote login framework; if incidents happen, we may be forced to disallow remote login altogether.

## Installation

You can find install instructions for your particular operating system [here](#).

## Setup

Once you have the x2go client installed (along with any other software required, e.g. XQuartz on Mac), you may set up a *profile* to remote login to any of our lab computers. The following settings are the only ones you should need to change from default:

- your class login, e.g. **ee106a-aaa**
- address of the lab machine, e.g. **c111-1.eecs.berkeley.edu**
- the desktop environment should be **XFCE**, although on some machines **MATE** should also work (and it will look nicer)

## An important final note

In order to allow multiple users to run ROS applications on the same machine, we ask that, when you log in remotely, you **choose a port number for the environment variable `ROS_MASTER_URI` that is different from the default port 11311**. Simply pick another 5-digit number, for example:

```
export ROS_MASTER_URI=http://$(hostname --short):51304
```

This will let ROS nodes you launch connect to your `roscore` instead of another user's `roscore`. Make sure to run the above command in the same terminal right before you launch your `roscore`. (Alternatively, if you always plan to log in remotely in the future, you can add this line to the end of your `bashrc`.)