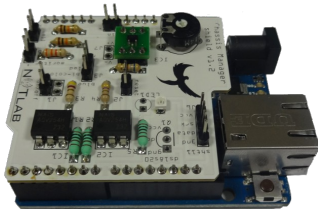# Configuring the NITlab Chassis Manager (CM) Card

Components needed
1. NITlab Chassis Manager (CM) Card
2. FTDI programmer 5V (you can acquire the programmer for aprox. $15 from Sparkfun)
3. Male Mini-USB-B to Male USB-A cable

NITlab CM Card

FTDI programmer

Male Mini-USB-B to Male USB-A cable

Installing the Arduino IDE
1. Download the Arduino IDE from http://arduino.cc/en/Main/Software and install
2. Download the additional libraries from here
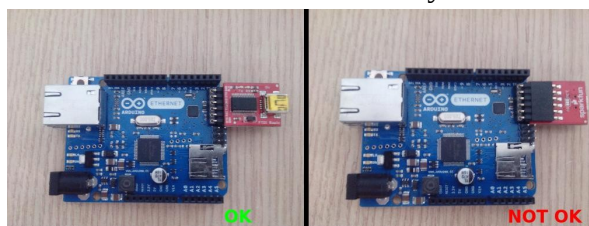3. Extract the libraries and copy them to the *libraries* folder inside the *arduino* folder

Upload code to the CM Card
1. Connect the CM Card to the computer via the FTDI programmer
2. Open the Arduino IDE and load the NITlab CM Card Firmware code (*File → Open...*)
3. In lines 33, 34, 73 and 75, change the MAC and IP addresses to the desired ones
4. Select the board type: ***Tools → Board → Arduino Ethernet***
5. Select the serial port: ***Tools → Serial port → /dev/ttyUSBx*** (or *COMx* for Windows)
6. Hit the *Upload* button

Troubleshooting
My Serial port is not shown under the *Tools->Serial port* tab in the Arduino IDE:
- Make sure that the FTDI board is connected correctly

- For Windows users, make sure the FTDI drivers are installed http://www.ftdichip.com/Drivers/VCP.htm

When I hit the *Upload* button, some error messages are displayed and the uploading fails:
- Make sure you have installed the libraries correctly
- If the errors persist, try installing a different version of the Arduino IDE