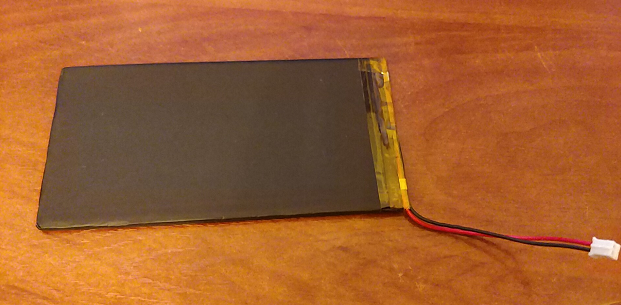
**Currently owned materials**



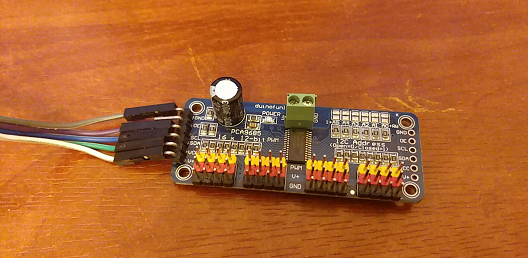
3.7v polymer lithium battery



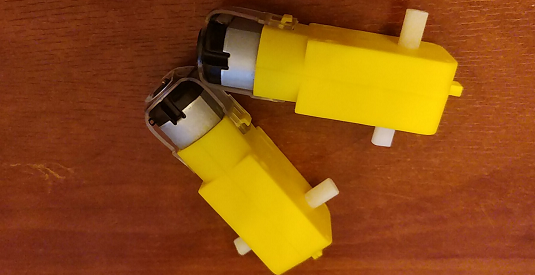
3.7A to 5A 2.4A power supply board



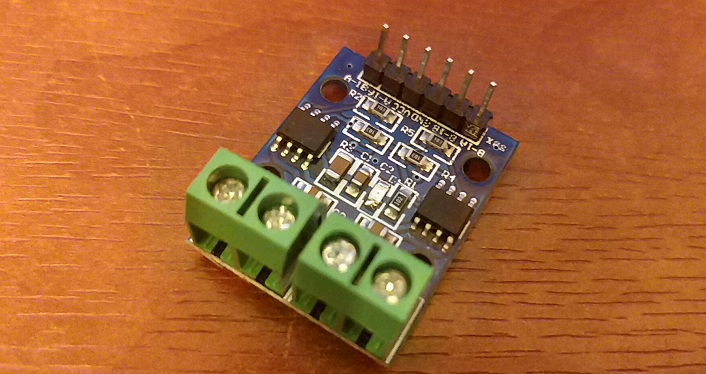
9g servo



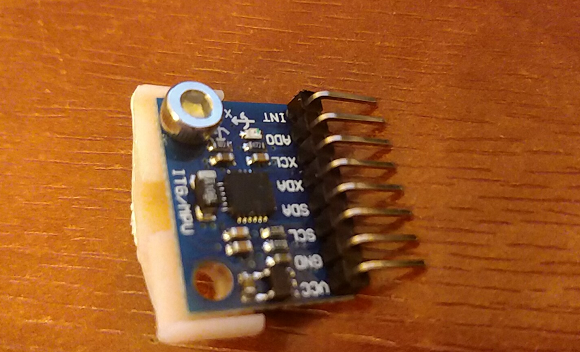
IPCA9685



TT motor(1:48)



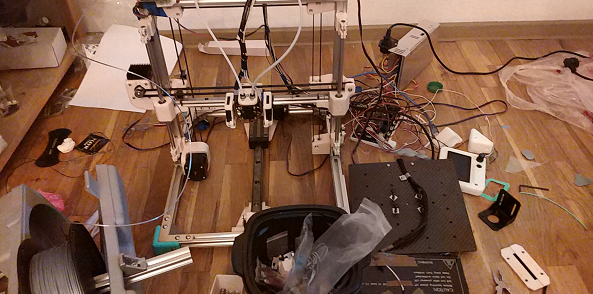
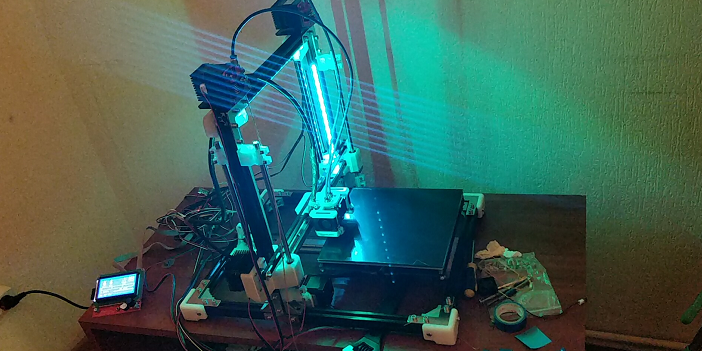
L9110



A super cheap mpu6050+gy521 (2rmb for 6 axis...)

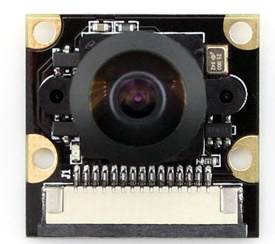


Raspberry pi 3b



3d printer that we made in holidays \*2 (1 needs some fix ..)

**What we still need**



A CSI camera



Some photoelectric speed measuring modules

**Ubuntu Mate for Raspberry pi**

<https://ubuntu-mate.org/raspberry-pi/>

Use Win32DiskImager to write，nothing special…

Official issues: First boot setup WiFi doesn’t work, at all. Reboot and WiFi will be available.

sudopasswd to change root password

install SSH

sudo apt-get install openssh-server

install VNC

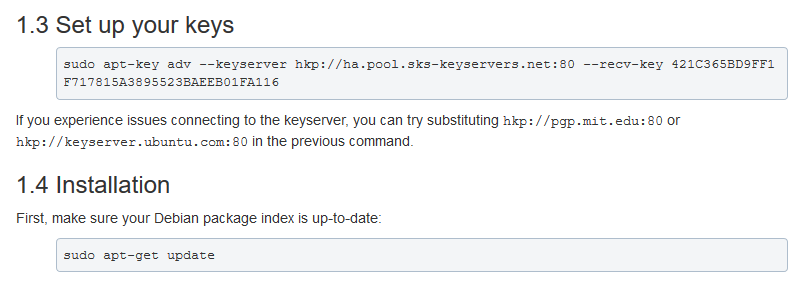
sudo apt install -y xrdp

install ROS Kinetic

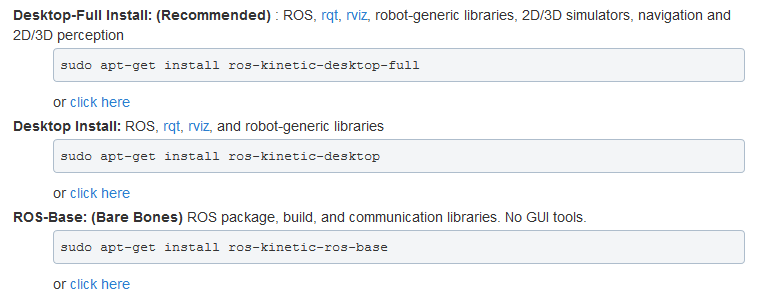
<http://wiki.ros.org/kinetic/Installation/Ubuntu>

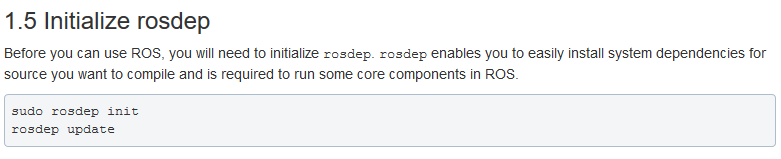
what you need

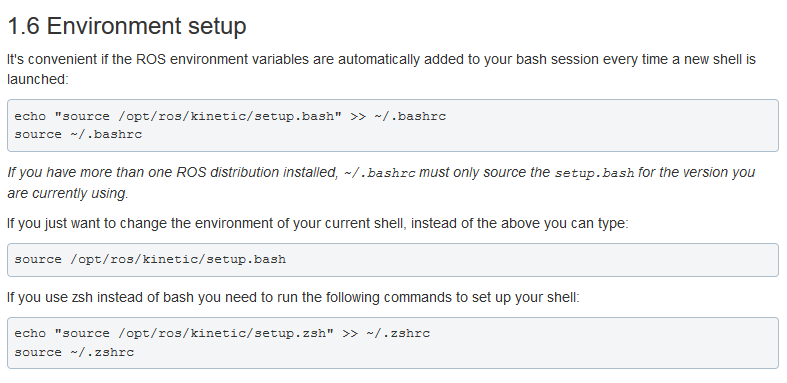


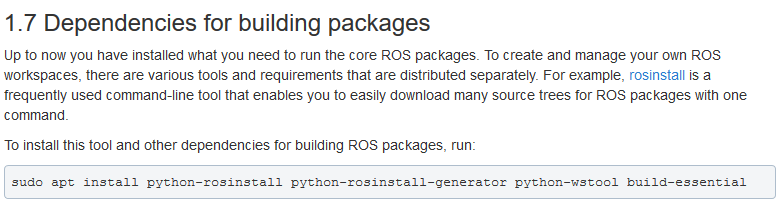


You need onlyu one of them









**What if ROS doesn’t work with python3**

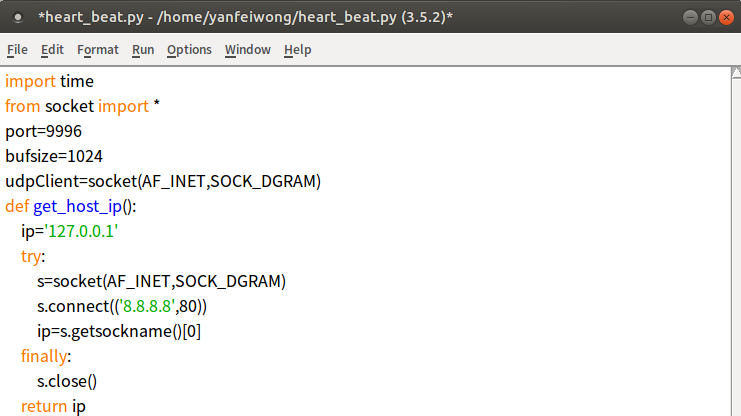
pip3 install pyyaml

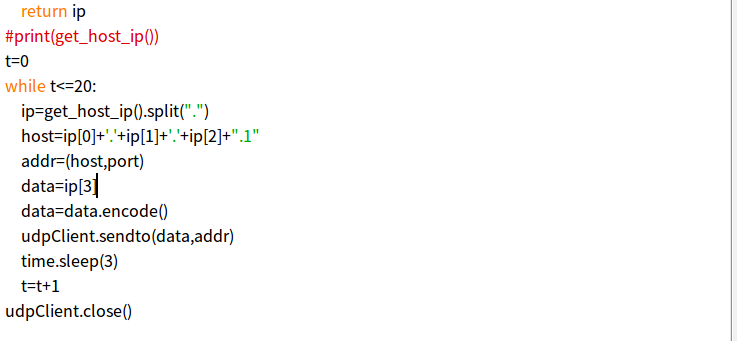
sudo apt-get install python3-catkin-pkg-modules

sudo apt-get install python3-rospkg-modules

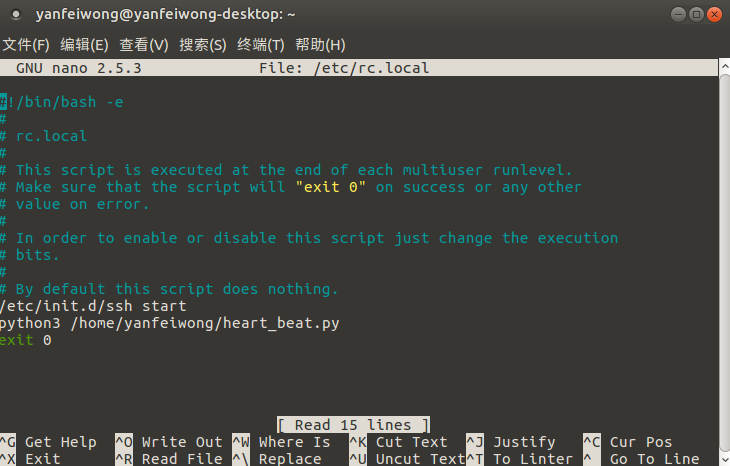
after installed those pack you might need re install ros again….

**What if you do not want to set a Static IP for your Pi**





sudo nano /etc/rc.local



chmod +x /etc/rc.local

Then every time it boot up ,it will send its ip to the host, like 20 times in 1 minute ,just don’t forget the port you set….