

# 1 Requirements

- Ubuntu 16.04
- ROS Kinetic Full
- Configured catkin\_workspace here: ~/pepper\_ws

## 2 Pepper ROS

### 2.1 Dependencies

```
sudo apt-get install git ros-kinetic-pepper-meshes ros-kinetic-dr-base  
ros-kinetic-move-base-msgs ros-kinetic-octomap ros-kinetic-octomap-msgs  
ros-kinetic-humanoid-msgs ros-kinetic-humanoid-nav-msgs ros-kinetic-camera-info-manager  
ros-kinetic-camera-info-manager-py
```

### 2.2 pepper\_robot Package

```
cd ~/pepper_ws/src  
  
git clone https://github.com/ros-naoqi/pepper_robot.git  
rosdep install pepper_bringup  
  
git clone https://github.com/ros-naoqi/naoqi_driver.git  
rosdep install -i -y --from-paths ./naoqi_driver
```

After that compile the ros packages

```
cd ~/pepper_ws  
catkin_make
```

## 2.3 NaoQi SDK

Download Python and C++ SDK from Softbank's software center.

- naoqi-sdk-2.5.5.5-linux64
- pynaoqi-python2.7-2.4.3.28-linux64

Login to download the file here: <https://community.ald.softbankrobotics.com/en/resources/software/language/en-gb> Untar the SDK packages with

```
cd ~/Downloads

tar -xf pynaoqi-python2.7-2.4.3.28-linux64.tar.gz
tar -xf naoqi-sdk-2.5.5.5-linux64.tar
```

Add the location of the SDKs to your bashrc file

```
gedit ~/.bashrc

export PYTHONPATH=${PYTHONPATH}:<your path>/pynaoqi-python2.7-2.4.3.28-linux64
export NAO_SDK_PATH=<your path>/naoqi-sdk-2.5.5.5-linux64
```

Enable new bashrc config by sourcing

```
source ~/.bashrc
```

## 2.4 Startup Pepper ROS

```
roslaunch pepper_bringup pepper_full.launch nao_ip:=<peppers IP> roscore_ip:=<your IP>
network_interface:=<your interface>
```