Installation

Open a new terminal by pressing Ctrl + Alt + t or executing the "Terminal" application using the Ubuntu 18 launch system.

Set up the Jetson Nano to accept software from *packages.ros.org*:

```
$ sudo sh -c 'echo "deb http://packages.ros.org/ros/ubuntu
$(lsb_release -sc) main" > /etc/apt/sources.list.d/ros-
latest.list'
```

Add a new apt key:

```
$ sudo apt-key adv --keyserver
'hkp://keyserver.ubuntu.com:80' --recv-key
C1CF6E31E6BADE8868B172B4F42ED6FBAB17C654
```

Update the Debian packages index:

```
$ sudo apt update
```

Install the ROS Desktop package, including support for `rqt`, `rviz` and other useful robotics packages:

```
$ sudo apt install ros-melodic-desktop

$ echo "source /opt/ros/melodic/setup.bash" >> ~/.bashrc
$ source ~/.bashrc
```

Install and initialize rosdep.

```
$ sudo apt install python-rosdep python-rosinstall python-
rosinstall-generator python-wstool build-essential

$ sudo rosdep init

$ rosdep update
```

Now the Jetson Nano is ready to execute ROS packages

Install the following dependencies:

```
$ sudo apt-get install cmake python-catkin-pkg python-empy
python-nose python-setuptools libgtest-dev python-
rosinstall python-rosinstall-generator python-wstool
build-essential git
```

Create the catkin root and source folders:

```
$ mkdir -p ~/catkin_ws/src
$ cd ~/catkin_ws/
```

workspace by issuing a first "empty" build command:

```
$ catkin_make
```

Finally, update your `.bashrc` script with the information about the new workspace:

```
$ echo "source ~/catkin_ws/devel/setup.bash" >> ~/.bashrc
$ source ~/.bashrc
```

Your catkin workspace is now ready to compile your ROS packages from source directly onto the Jetson Nano.