

# Tutorial 2 - Install ROS

## ME 4140 - Introduction to Robotics - Fall 2020

Now your Ubuntu Operating System is running you are ready to install ROS. You can read more about this installation [here](#).

1. Setup your sources.list 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'
```

2. Set up your keys.

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

3. Update your Linux system.

```
sudo apt update
```

4. Install ROS Melodic Desktop-Full

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

5. Environment Setup (2 separate commands)

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

```
source ~/.bashrc
```

6. Initialize rosdep (2 separate commands)

```
sudo rosdep init
```

```
rosdep update
```

7. Install Development Tools

```
sudo apt install python-rosinstall python-rosinstall-generator \  
python-wstool build-essential
```

8. Close the terminal. Open a new terminal and try the following command:

```
roscore
```

9. If you see ROS start in the terminal your ROS installation was successful!