

This time we will clone an existing project on github and run the robotic arm by it

First we start by copying these instructions into the workspace

```
$ rosdep install--from-paths src--ignore-src-r-y
```

Then prove this packages :

```
$ sudo apt-get install ros-melodic-moveit
```

```
$ sudo apt-get install ros-melodic-joint-state-publisher rosmelodic-joint-state-publisher-gui
```

```
$ sudo apt-get install ros-melodic-gazebo-ros-control jointstate-publisher
```

```
$ sudo apt-get install ros-melodic-ros-controllers ros-melodicros-control
```

after that configuring Arduino by install Arduino IDE in ubuntu through

<https://www.arduino.cc/en/software> to install run \$ sudo ./install.sh after unzipping the folder

next launch Arduino IDE by Install the arduino package and ros library http://wiki.ros.org/roserial_arduino/Tutorials/Arduino%20IDE%20Setup

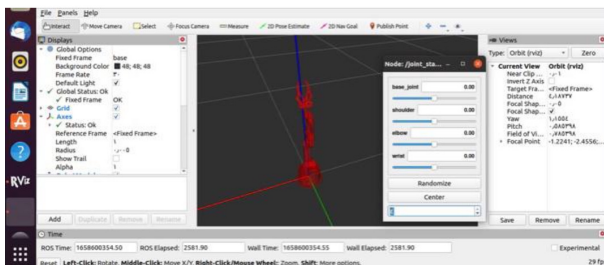
note: make sure to change the port permission before uploading the Arduino code

```
$ sudo chmod 777/dev/ttyUSB0
```

Finally the arm will be controlled:

by joint_state_publisher

```
$ roslaunch robot_arm_pkg check_motors.launch
```



by moveit and kinematics

```
$ roslaunch moveit_pkg demo.launch
```

