

Quigley range Ahead.py 01/31/18  
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**\$ roslaunch turtlebot\_gazebo turtlebot\_world.launch**

**\$ python range Ahead.py** Page 105

```
#!/usr/bin/env python range Ahead.py
```

```
# BEGIN ALL
```

```
import rospy
```

```
from sensor_msgs.msg import LaserScan
```

```
# BEGIN MEASUREMENT
```

```
def scan_callback(msg):
```

```
    range Ahead = msg.ranges[len(msg.ranges)/2]
```

```
    print len(msg.ranges)
```

```
    print "range Ahead: %0.1f" % range Ahead
```

```
# END MEASUREMENT
```

```
rospy.init_node('range Ahead')
```

```
scan_sub = rospy.Subscriber('scan', LaserScan, scan_callback)
```

```
rospy.spin()
```

```
# END ALL
```

```
range Ahead: 1.3 Range in X, length
```

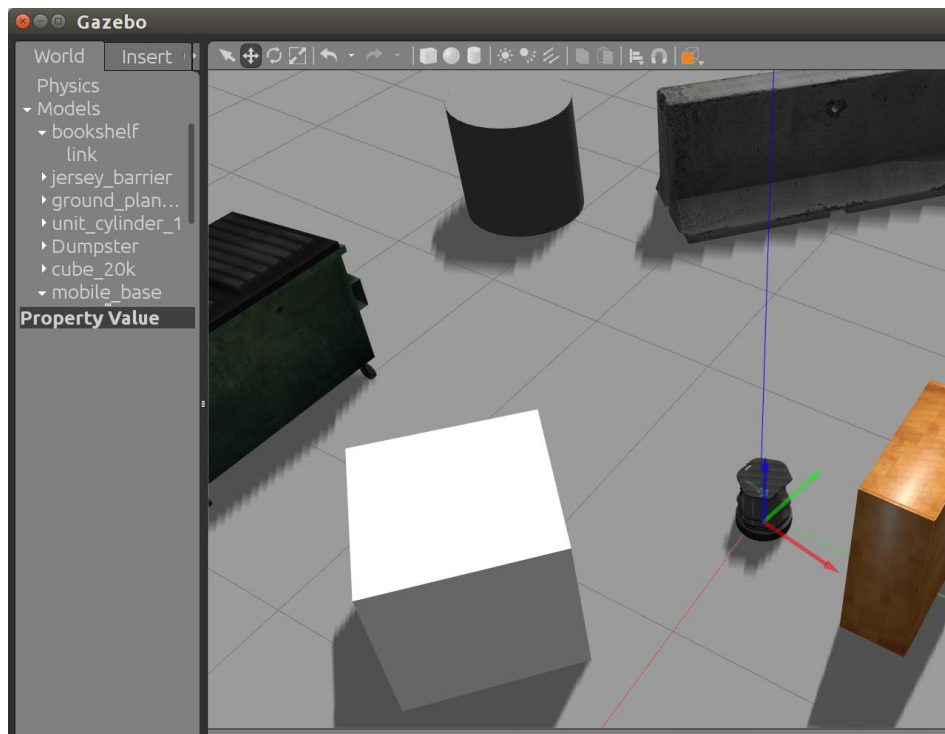
```
640
```

```
range Ahead: 1.3
```

```
640
```

```
range Ahead: 1.3
```

```
640
```



Lets see echo of scan

```
harman@D104-45931:~/Desktop$ rostopic echo scan -n 1
```

```
header:
```

```
seq: 2151
```

```
stamp:
```

```
secs: 1017
```

```
nsecs: 420000000
```

```
frame_id: /camera_depth_frame
```

```
angle_min: -0.521567881107
```

```
angle_max: 0.524276316166
```

```
angle_increment: 0.00163668883033
```

```
time_increment: 0.0
```

```
scan_time: 0.0329999998212
```

```
range_min: 0.449999988079
```

```
range_max: 10.0
```

```
18 a line – center is 320 Line About 17
```

```
ranges: [nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan, nan,
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```

```
151
```

4 a line

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intensities: []

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