Autonomous Driving TurtleBot Installation Guide

- 1. Download the appropriate virtual machine for your platform from and follow the instructions:
 - https://www.mathworks.com/supportfiles/robotics/ros/virtual machines/v3/installation instructions.htm
- 2. After installation is complete, open the VM and run following commands:
 - echo export ROS_MASTER_URI=http://192.168.112.129:11311 >> ~/.bashrc
 - echo export ROS_HOSTNAME=192.168.112.129 >> ~/.bashrc

Note that **192.168.112.129** is the IP address of your VM that is shown in the desktop of VM.



3. Open the **config.ini** file and change the host.addr to IP address of your PC and vm.addr to IP address of your VM.

```
[Network]
host.addr = 192.168.1.29
vm.addr = 192.168.112.129
port.header = 50000
```

- 4. Put *agent.py*, *environment.py*, *memory.py*, *util.py*, *vm.py*, *vm_bringup.py*, *config.ini* files to a folder in virtual machine.
- 5. Double click **Gazebo TurtleBot World** to run gazebo in VM.



6. Run **host_bringup.py** in the PC and **vm_bringup.py** in the VM.