
(Optional) TurtleBot Stage Tutorial for MIE 443H1S



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Installation:

1. Download the mie443_stage package from Quercus under Files>Manual>mie443_stage.zip.
2. Extract mie443_stage.zip into your src folder in your catkin workspace.
3. cd into your catkin workspace and catkin_make.

Contest 1 (Running Simulation):

1. Launch turtlebot stage simulator:



```
roslaunch mie443_stage turtlebot_in_stage_contest1.launch
```

2. Run gmapping:



```
roslaunch gmapping slam_gmapping
```

3. Run the contest code:



```
roslaunch mie443_contest1 contest1
```

Contest 2 (Running Simulation):

1. Launch turtlebot stage simulator with map and amcl:



```
roslaunch mie443_stage turtlebot_in_stage_contest2.launch
```

2. Run the contest code:



```
roslaunch mie443_contest2 contest2
```

Contest 3 (Running Simulation):

1. Launch turtlebot stage simulator:



```
roslaunch mie443_stage turtlebot_in_stage_contest3.launch
```

2. If you are not using gmapping, publish a fake map:



```
roslaunch static_transform_publisher 1 0 0 0 0 0 map odom 100
```

3. Run the contest code:



```
roslaunch mie443_contest3 contest3
```

****Please note that Turtlebot Stage in its current form will only allow your team to test the TurtleBot's emotions/motions. This is because Turtlebot Stage does not have a model for a moving person that the simulated TurtleBot can track.****