ROS: Robot Localization

Course assignment: Intelligent Agents and Robotic Systems
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1 Introduction

Robot localization is a process to examine the exact position within its environment; Navigation is a crucial activity for a mobile robot for safety, operation and other reasons. A mobile robot needs to know not only its *absolute* position but also its *relative* position in respect, for example to a human who might interact with it. Navigation process requires 4 building blocks; *Perception*, *Localization*, *Congition* and *Motion Control*.

2 Methods

3 Results

4 Discussion

5 Example

References

[1] Thomas Moore and Daniel Stouch. *A Generalized Extended Kalman Filter Implementation for the Robot Operating System*. Sensor Processing and Networking Division Charles River Analytics, Inc. Cambridge, Massachusetts, USA.