

DISTRIBUTED SECURE STATE ESTIMATION
WITH THE TURTLEBOT PLATFORM

by

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Acknowledgments

Distributed Secure State Estimation with the TurtleBot Platform

Abstract

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As mobile robotic systems become increasingly more popular, the need for reliable state estimation systems has also increased. This thesis examines the feasibility of a distributed state estimation system using Kalman filters, and its resilience to erroneous or compromised sensor measurements. This system is implemented on the TurtleBot platform using the Robot Operating System, and performance is evaluated with the Gazebo simulator.

Chapter 1

Introduction

This is an introduction.