

Thesis Outline

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- Introduction
 - Problem Statement
- Literature Review / Previous Work
 - TurtleBot
 - Secure State Estimation
 - Distributed State Estimation
 - Noise Model for Simulated Robots
- Hardware Platform
 - TurtleBot
 - * Basic Features and Overview
 - * ROS Software Interface
 - * Control System
 - Kobuki Base
 - Navigation
 - ZedBoard
 - * Basic Features and Overview
 - * Xilinx Zynq Features and Overview
- Distributed State Estimation
 - Theory
 - Methods
 - * ROS node structure
 - * Communications logic
 - * Gazebo simulation details
 - Vulnerabilities of Methods
 - * DoS attack

- Results
- Future Work
- Conclusion