

Introduction to SLAM Simultaneous Localization And Mapping

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Outline

- Introduction
- Localization
- SLAM
- Kalman Filter
 - Example
- Large SLAM – Scaling to large maps

Introduction

- (Localization) Robot needs to estimate its location with respects to objects in its environment (Map provided).
- (Mapping) Robot need to map the positions of objects that it encounters in its environment (Robot position known)
- (SLAM) Robot simultaneously maps objects that it encounters and determines its position (as well as the position of the objects) using noisy sensors.