

TurtlebotSLAM

Group 1

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Table of contents

- 1 Introduction
- 2 Problem Description
- 3 Exploration Algorithms
 - Random
 - WFD
 - FFD
- 4 Experiments
- 5 Results
- 6 Conclusions
- 7 Planning

Introduction

- Phase 1: Exploration, Frontier Detection
- Phase 2: Graph-based SLAM
- Phase 3: Exploration and Landmark detection
- Competing against other teams in the competition

Problem Description

- short problem description
- platform used
- turtlebot

Exploration Algorithms

- Random
- Wave Frontier Detection (WFD)
- Fast Frontier Detection (FFD)



Random

- depends on the map
- not usefull

Wave Frontier Detection

- very fast calculation of new frontiers
- scans only regions, where the robot have already been
- performs good in small areas
- cannot be expected to perform well in large areas



FFD

Fast Frontier Detection

Experiments

- setup of experiments
- % discovered when done
- % discovered over time
- % time taken



Results

-results

Conclusions

- conclusions
- terrible documentation

Planning

- graph based SLAM
- chicken egg
- landmark detection
- entropy