Trundl: An Exploration of Particle Filters

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Abstract

1 Definition

1.1 Project Overview

For this project, I decided to look at the problem of robot localization and pathfinding under uncertainty. I first started to understand how interesting a problem this could be when I saw a video from Sebastian Thrun's AI for Robotics course at Udacity. The video showed a particle filter localizing a robot in a

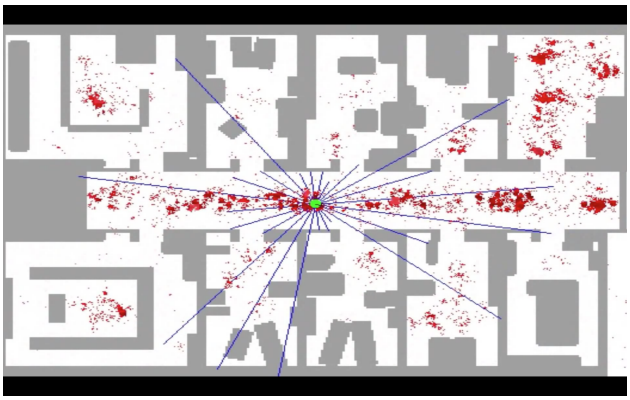

Figure 1: Framegrab from [**?**] showing a simulated robot localizing itself within a set of rooms.

References

[1] Peter Zatko, Ivan Poupyrev, Rachid El Guerrab, and Regina Dugan. Some cool motion sensor stuff.