Designing a SLAM-Algorithm from scratch

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November 2025

Chapter 1

Introduction

1.1 SLAM algorithms

Simultaneous localization and mapping (SLAM for short) algorithms are a very powerful class of algorithms, allowing robots to better interact with their environment.

1.2 Robot

The use-case in this article will be for a small, simple robot to run the algorithm on in order to navigate a student dorm and find it's base station to recharge.

Chapter 2

Occupation maps