Local Path Planning

CSCE Summer Intern Project for Undergraduate Student

Path Planners

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June 10, 2023

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1 Executive Summary

The executive summary is a brief description of the project. The purpose is to give a quick overview of (1) need, goal and objectives, (2) design and implementation, and (3) expected results and benefits of the project. The intended audience of the executive summary is a program director, someone who makes decisions about which projects will receive funding. Since the executive summary is a summary, it should be written last.

2 Introduction

2.1 Assumptions

1. The scenario takes place in 2D environment.
2. The planned global path is fixed and given initially.
3. The obstacles are fixed and given initially.
4. The autonomous vehicle is 4-wheel vehicle, which can be regarded as a 4.5 x 1.8m rectangular.

2.2 Need Statement

A way to implement a lane changing algorithm so that the autonomous vehicle can avoid objects on its path, i.e. the road.

2.3 Goals and objective

2.4 Design and Feasibility

3 Literature and Technical Survey

4 Proposed Work

4.1 Evaluation of alternative solutions

4.2 Design specification

4.3 Approach for design validation

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6 References

References

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7 Apendix