Local Path Planning



CSCE Summer Intern Project for Undergraduate Students

Path Planners

Syed Mustafa

Supervisor: Dr. Song
Department of Computer Science
Texas A&M University

June 21, 2023

Contents

1	CARLA installation	2
2	References	2

Abstract

This document is to help an

1 CARLA installation

2 References

References

- [1] LaValle, S. M. (2006). Planning algorithms. Cambridge university press.
- [2] LaValle, S. M. (1998). Rapidly-exploring random trees: A new tool for path planning.
- [3] Wang, B., Liu, Z., Li, Q., & Prorok, A. (2020). Mobile robot path planning in dynamic environments through globally guided reinforcement learning. IEEE Robotics and Automation Letters, 5(4), 6932-6939.
- [4] Kastner, L., Cox, J., Buiyan, T., & Lambrecht, J. (2022, May). All-in-one: A DRL-based control switch combining state-of-the-art navigation planners. In 2022 International Conference on Robotics and Automation (ICRA) (pp. 2861-2867). IEEE.
- [5] Naderi, K., Rajamäki, J., & Hämäläinen, P. (2015, November). RT-RRT*: a real-time path planning algorithm based on RRT. In Proceedings of the 8th ACM SIGGRAPH Conference on Motion in Games (pp. 113-118).
- [6] Brock, O., & Khatib, O. (1999, May). High-speed navigation using the global dynamic window approach. In Proceedings 1999 IEEE international conference on robotics and automation (Cat. No. 99CH36288C) (Vol. 1, pp. 341-346). IEEE.
- [7] Dosovitskiy, A., Ros, G., Codevilla, F., Lopez, A., & Koltun, V. (2017, October). CARLA: An open urban driving simulator. In Conference on robot learning (pp. 1-16). PMLR.