

Trajectory Planning and Control of a Non-holonomic Platform

This assignment is dedicated to developing and implementing the planning and control system for a non-holonomic platform that autonomously goes from point A to point B while avoiding the obstacles in between.

Task Overview

- Choose a suitable simulation environment (e.g., MATLAB/Simulink or Python, C++) to implement the developed mathematical models.
- Write the code to mathematically model and simulate the dynamics of the robot.
- Control System and Trajectory Planning

Simulation and Testing

- Run simulations to test the functionality and effectiveness of the control system and the trajectory planning algorithm.
- Analyze and discuss the system's response, accuracy, and flexibility.

Submission Guidelines

- GitHub Repository: Ensure your code is available on a GitHub repository. Include clear documentation and comments to aid understanding.
- Report Format: Submit a detailed report in a readable format.
- Deadline: The assignment deadline is October 15, 2024.

Feel free to reach out if you have any questions or need clarification on the assignment. We look forward to reviewing your innovative solutions.

Best regards,

RMAL TEAM