

Homework 5 – Teleop Commands

Submitted in partial fulfillment of the requirements for the course of

ENPM809T – Autonomous Robotics

By

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INTRODUCTION

The aim of this project is to use complete the mechanical and electrical assembly of the ground vehicle. Then, a script is written to control the motors and implement movement of the vehicles. We also create a script to run at bootup of the pi to prevent the mobile robot from activating any of its motors.

APPROACH

We first assemble the ground vehicle as instructed. Then a python class is created to control the motors, finally another script is written which automatically runs at bootup of the pi to stop the motors from running using SYSTEMD

CODE AND OUTPUT VIDEO

The entire repository containing the problem statement and the data can be viewed on <https://github.com/adheeshc/raspi-teleop>

The YouTube output video can also be viewed on <https://www.youtube.com/watch?v=2oXz5tk5Fzk>

RESULTS

The time-domain signals are sketched below

