ME131 Vehicle Dynamics and Control
Final Project

Assigned: 4/22/2019 Due: 5/10/2019, 11:59pm (On bCourses)

Please submit a .pdf of the project report and a .zip file of all relevant files (.m, .py, etc.). In the pdf abstract please add a link to a video of your simulation or experiment. Late projects will not be accepted.

1 Deliverables

1. 3 Page Technical Report
2. .zip with all the files
3. Short video of your experiment uploaded on googledrive or youtube and linked from your pdf.

2 Topics

- Lane Following (Baseline project): See 131_Lab_10.pdf for more information.
- Drift Parking: See 131_Lab_11.pdf for more information.
- If you have another project that you are interested in, feel free to do so. Check in with the GSI to verify that it suffices for this course.

3 Technical Report Guideline

You can use the following technical report guideline. It can be written in any format (word, latex) but submit the pdf.

3.1 Abstract

Provide an abstract for your experiment. Include some detail of the problem, overview of your approach, and your results. **Provide a link to your video here.**

3.2 Introduction

Provide the problem statement and some background information.

3.3 Experimental/Sumulation Setup

Describe your experimental setup such as hardware and sensors.

3.4 Approach and Methods

Describe your approach and methods in detail. Include the theoretical components of this experiment and relevant equations. Detail a high level overview of what is implemented in the code such as your algorithm and nodes that are running.

3.5 Results

Include any relevant plots and images.

3.6 Discussion

Discuss your results. If there were issues, describe what went wrong.

3.7 References

Cite your reference here (if any).