UDACITY

PROJECT

PID Controller

A part of the Self-Driving Car Engineer Program

PROJECT REVIEW

CODE REVIEW

NOTES

SHARE YOUR ACCOMPLISHMENT!

Meets Specifications

Thanks for revising your code. Your project has now met all specifications.

Also, you might be interested in some of these links which can give you more appreciation of how PID is used in the real world:

- http://oa.upm.es/30015/1/INVE_MEM_2013_165545.pdf
- https://www.cds.caltech.edu/~murray/courses/cds101/fa02/caltech/astrom-ch6.pdf
- https://www.novatechweb.com/wp-content/uploads/2011/03/PID_Tuning_Guide_022810.pdf

Again, congratulations!

Compilation

✓

Code must compile without errors with `cmake` and `make`.

Given that we've made CMakeLists.txt as general as possible, it's recommend that you do not change it unless you can guarantee that your changes will still compile on any platform.

Implementation

✓

It's encouraged to be creative, particularly around hyperparameter tuning/optimization. However, the base algorithm should follow what's presented in the lessons.

Reflection

✓

Student describes the effect of the P, I, D component of the PID algorithm in their implementation. Is it what you expected?

Visual aids are encouraged, i.e. record of a small video of the car in the simulator and describe what each component is set to.

✓

Student discusses how they chose the final hyperparameters (P, I, D coefficients). This could be have been done through manual tuning, twiddle, SGD, or something else, or a combination!

Simulation

✓

No tire may leave the drivable portion of the track surface. The car may not pop up onto ledges or roll over any surfaces that would otherwise be considered unsafe (if humans were in the vehicle).

DOWNLOAD PROJECT

RETURN TO PATH

Rate this review

Student FAQ