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Scan Matching Localization

REVIEW

CODE REVIEW 5

HISTORY

Meets Specifications

Fantastic job, Udacian! You are getting some very good results with both algorithms. It was my pleasure to go through your amazing code.

If you want to go for more, you can incorporate what you have learned in this project into an autonomous car simulator, such as CARLA or AirSim. This would be very challenging, but give it a shot if you'd like to!

For more in-depth comparison of NDT and ICP, you can read through [this paper!](#)

Kind regards,

Presentation & Compilation

✓	<p>The code should be easy to read and cleanly formatted. While there is no required style guide, you may consider the Google C++ style guide or another as a basis. You could look at the code at a much later time and still be able to understand what was going on.</p> <p>Comments are used when needed.</p>
	<p>Amazing implementation there! Very nice job :)</p> <p>Extra resources for this rubric:</p> <ul style="list-style-type: none">• MIT C++ Couse• Google C++ Guideline
✓	<p>The code is able to compile and run without errors.</p>
	<p>Yay, you have provided a very clean two-algorithm solution that compiles and runs like a magic ✓</p>

Localization

✓	<p>In a drive of at least 170m in the simulator, the pose error never goes above 1.2m.</p>
	<p>a) I could run your simulation more than 170mt ✓ b) your pose error was minimal ✓</p>
✓	<p>Be able to continuously localize the car when it is moving at medium speed. In the workspace that is 3 taps on the up arrow. The car shouldn't have to be moving at really slow speed in order to localize.</p>
	<p>Be able to continuously localize the car when it is moving at medium speed. ✓ In the workspace that is 3 taps on the up arrow. The car shouldn't have to be moving at really slow speed in order to localize. ✓</p>

3D Scan Matching

✓	<p>The ground truth is only used at the beginning of localization, and is not utilized again. From there, the lidar data should be used to localize.</p>
	<ul style="list-style-type: none">• the ground truth was used only at the beginning ✓

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5 CODE REVIEW COMMENTS ➤