Snapshot Objectives

LA City Sidewalk Assessment Project

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1 Snapshot 1 Feb 15

1.1 Design and planning

The main focus of this snapshot is to simply layout the plans for the future phases. The design of the vehicle will be worked out. Goals and roles will be assigned.

2 Snapshot 2 Mar 14

2.1 Map dashboard integration

The goal is to create a visualizer that allows us to plan routes an get location data from the vehicle

2.2 Movement

The physical structure of the vehicle needs to be made, assembled, and function. The primary goal here is to get the desired movement capabilities while being manually controlled by an operator.

3 Snapshot 3 April 12

3.1 Admin tools

A suite of admin tools will be developed to give commands to the autonomous systems.

3.2 Measurement tools

Set up the tool that the vehicle will use to take measurements along the side walk. This includes encoders on the wheels to measure distance traveled, lidar and sonar to detect objects in front of the vehicle, and accelerometers and gyroscopes to measure the slope of the sidewalk.

4 Snapshot 4 May 9

4.1 Location Marking

When the vehicle finds obstacles and noncomfortities on the path, it will note the GPS location and take a photo of the location.

4.2 Export Features

A tool suite designed to efficiently export the data for analysis

4.3 Final Polish

Clean everything up and make it look good

4.4 Future goals

Longer range, estimate slope and heights with visual camera