Optimization 2020-21 Project Outline - CEV

**Idea 1**

* Debug and test interpolation mechanism (from last year).
* Create graph from interpolated track data with directed edges.
* Update cost function. Figure out a way to incorporate time limit.
* Use Djikstra’s with average speed (?) to find the most energy efficient path.
* Create speed profile optimizer for the shortest path (similar to current MATLAB optimizer).
* Update in real-time.

**Idea 2**

* Debug and test interpolation mechanism (from last year).
* Modify last year’s code to precompute the cost associated with going from one second to another with different speeds and steering angles (might take a while).
* Create optimization mechanism that works by querying the array and finding most optimum path with speed profile.
* Update in real-time.

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