

sdmay19-37: Are Cross Country Courses Avoiding Hills?

Week 8 Report

November 4 - November 10

Team Members

Connor Smith — *Ground Truth Engineer*

Thomas Chambers — *Ground Truth Engineer*

Ryan Hilby — *Data Handling Engineer*

Jacob Feldman — *Data Handling Engineer*

David Kirshenbaum — *Data Analysis Engineer*

Andrew Mumm — *Data Analysis Engineer*

Summary of Progress this Report

This week, the data handling team reached the end of its first formal cross country course study and deduced several takeaways from the results that boosted our confidence in our methods in this design process. While the majority of the team was fairly strapped for time this week, we also made more progress on the web app's structure, especially relating to our switch to Angular. We also worked to redefine roles a bit on the team given how the data handling team has more time on their hands now that we have a good dataset to experiment with from our survey.

Pending Issues

The data handling team may explore different alternatives to R this week.

Past Week Accomplishments

- Connor
 - Processed XC course survey data
 - Developed several visualizations of survey's results for use in final presentation
 - Thomas
 - Mostly catching up with my teammates.
 - Ryan
 - Looking into previous studies quantifying hills and developing XC courses
 - Looked into the Strava GAP model
 - Jacob
 - Created the environments for our front and back ends, including all the boiler plate code.
 - David
 - Researched/studied Angular so that I can use it this week.
 - Andrew
 - Did not have time for the project this week.
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Plans for Upcoming Reporting Period

- Connor
 - Continue to work one processing and extracting information from the survey data
 - Communicate with more XC officials to get more routes for future surveys
- Thomas
 - Getting necessary information for final report/discussion of ground truth.
- Jacob
 - Configure the backend to pull elevation data out of a raster file.
- David
 - Going to get the front end of the website integrated with Angular.
- Andrew
 - Will try to connect GeoPython with Django web framework

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
Connor Smith	Survey processing and analysis	5	53
Thomas Chambers	Research on angular / django frameworks being discussed by team members. 2 hours	2	33.5
Ryan Hilby	Studied various hill quantification methods	3	30
Jacob Feldman	Set up boiler plate code for our front end and back end in our web app	6	37.5
David Kirshenbaum	Researched/studied Angular so that I can use it this week.	2	31
Andrew Mumm	None	0	24

Gitlab Activity Summary

Pushed boiler plate code for front end and back end.
