

EE/CprE/SE 492 WEEKLY REPORT 5

3/12/20-4/2/2020

Group Number: 17

Project Title: Development of an App for Android Smart Phone for Pavement Roughness Estimation

Client/Advisor: Halil Ceylan

Team Members:

Tanner Dempsay – Communications Manager

Joe Van Treeck – Data Manager

Christian Royston – Git Master

Justin Kuennen – Web Master

Greg Starr – Logistics Manager

Kyle Eckrich – Report Manager

Weekly Summary

- Backend
 - We are working on a standard preprocessing function for the raw acceleration data after the route is finished. Currently, we are looking at doing a bandpass via butterworth filter
 - Added handler for route history data requests from frontend. While we are waiting on database connection for that, this function returns preset sample data.
- Frontend
 - Justin has finished the route history list and detail views and is implementing the network calls to request route data from server.
 - Greg and Christian are finishing settings screen for updates car configuration.
- IRI calculation
 - Joe is working on the preprocesses functions and comparing the data results from different filtering

Past Week Accomplishments

- Route history handling on server
- Route history UI and detail view finished on frontend

Individual Contributions

| <u>Team Member</u> | <u>Contributions</u> | <u>Hours This Integration</u> | <u>Cumulative Hours</u> |
|--------------------|--|-------------------------------|-------------------------|
| Tanner Dempsay | Route history fetch functions for server, helped do preprocessing stuff for route data | 15 | 75 |
| Christian Royston | Working on settings screen for frontend | 13 | 66 |
| Joe Van Treeck | Comparing data sets with different filtering types | 14 | 74 |
| Justin Kuennen | Finished route list and detail UI screens | 16 | 72 |

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|--------------|--|----|----|
| Kyle Eckrich | Working on route data read/write to database | 11 | 75 |
| Greg Starr | Cleaned up route record code on frontend | 14 | 64 |

Plans for the Upcoming Week

- Working route history fetching on frontend
- Route data reading/writing to database
- Finished settings screen