

**sdmay19-16: Smartphone App to Detect TwD (Texting while Driving)**

Week 8 Report

Feb. 25 - March 3

**Team Members**Kristina Robinson - *Project Lead*Andrew Knaack - *Lead Designer*Sara Mace - *Meeting Scribe*Lucas Golinghorst - *Test Engineer*Ryan Baker - *Architect*Derek Clayton - *Report Manager***Summary of Progress this Report**

The focus of this reporting period was on fixing bugs in the proprietary texting and centripetal acceleration modules. Other group members continued to investigate OpenCV and Tensorflow. A companion acceleration app was created to test its accuracy against linear acceleration.

**Pending Issues**

- Bugs in proprietary texting app must be resolved
- Accelerometer accuracy must be determined
- Centripetal acceleration module display bugs must be fixed
- OpenCV accuracy must be determined
- Tensorflow problems persist and a decision must be made to continue with it or not.

**Plans for Upcoming Reporting Period**

Kristina - Continue work to fix bugs in proprietary texting application.

Andrew - Find a stabilization number for linear acceleration readings to get more accurate results

Sara - Try one more idea to fix proprietary texting application's messages on the wrong side of screen.

Lucas - Continue working on the opencv application.

Ryan - Will likely be working on a new module so we will be discussing that at the next team meeting

Derek - Will correct centripetal acceleration display and write method for calculating centripetal acceleration

**Individual Contributions**

Team Member	Contribution	Weekly Hours	Total Hours
Kristina Robinson	Continued fixing bugs in the proprietary texting application. The messages still display on the incorrect side of the screen and without our formatting.	6	39

Andrew Knaack	Made a quick accelerometer app to compare its accuracy to linear acceleration (it's much worse). Started carrying around app to test in moving vehicles and try to find a good stabilization number for the Z-axis	8	48
Sara Mace	Continued working on the proprietary texting application and tried to get the messages to show on the correct side of the screen	6	43
Lucas Golvinghorst	Debugged the image processing application that uses OpenCV software. There were some deprecated classes that had to be replaced, and some runtime errors causing the application to crash. Worked on cleaning up the code and identifying the accuracy of the application.	8	44
Ryan Baker	Continued to try to fix the ssl error with tensorflow with no luck. We will not be spending more time on this particular approach.	6	41
Derek Clayton	Worked on bug fixing in the centripetal acceleration module. Having difficulty getting data to display properly. Referenced android studio tutorials to learn basics of mobile development. Will apply lessons to module in next reporting period.	6	39.5
		Total Group Hours:	254.5

### Gitlab Activity Summary

Andrew added accelerometer sensor to speed module for comparison [8 files changed, 151 adds, 9 dels](2/26)

Derek made progress on implementing multiple sensors in accel module [2 files changed, 38 adds, 4 dels](3/3)

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