

EE 492 Weekly Report 5 MAY1627 Week 11 (3/29/16-4/5/16)

Advisors: Randy Geiger Client: Randy Geiger

Members (roles): Kelly McConville, Xiayang Sun, Yinkun Peng

Project Title: Smart fuel tank sensor

Weekly Summary

Made good progress with both the capacitance and weigh scale methods. Were able to get a working prototype for the capacitance method. Our main focus for the upcoming week is with our meeting and presentation with Dr. Amariucaí.

Meeting notes:

Discussed the success that we had with the capacitance prototype with Dr. Geiger. He suggested ways that we could bring our prototype close to a real world, polished solution. For example, building a case for the tank that is insulated with Styrofoam which will negate the effect of the capacitance between the chassis and the plates. We decided to finish up the working prototype with water as the fluid and then decide from there whether we want to move to gasoline.

Group Meeting with Advisors

Duration: 50 min **Members Present:** Kelly and Yinkun

Purpose and Goals: Discuss how we can quantify the accuracy of our measurements and how to proceed with polishing our working prototypes.

Achievements: Set new goals to work towards before the end of the semester.

Pending issues

Move working prototypes closer to complete solution.

Plans for next week

We will try to solve the problems based on Geiger's suggestions.

Individual Contributions(this week)

Kelly: Finished getting a working prototype and was able to accurately predict liquid level based on capacitance.

Yinkun: Made further progress with load cell method and was able to get working results.

Total contributions for the project

Made large strides towards completing our project this week. At this point we just need to work on refinement.