

EE 491 Weekly Report DEC15-17 Week 10 (3/30/15-4/5/15)

Advisors: Dr. Ravi Hadimani and Neelam Prahbu **Client:** Iowa State University
Members (roles): Marion Okoth (Team Leader), Elizabeth Clarkin (Website) and Matthew Mulloy (Weekly Reports)
Project Title: Magnetic Sensor Design.

Weekly Summary

The main goals this week complete the project plan version 2, and plan any final simulations, testing, or creating before finalizing the project for the semester.

Meeting notes:

3/30 Group Meeting

Duration: 30 min **Members Present:** All

- Discussed Project Plan #2
- Presentation signup
- Weekly report update

4/3 Group Meeting with Advisors

Duration: 60 min **Members Present:** Elizabeth, Matthew

Purpose and Goals:

Discussed the general finalization of the project of the current semester.

- Project Plan
- Design document
- Material geometry
 - Unit representation
 - Scientific verses industrial units
- FFT simulation
- Gantt chart
- Magnetic simulation and presentation for 4/10
- Materials
 - Hysteresis
 - Ringing measurements
 - Logistics with Ames Lab requirements and procedures
- Presentation
 - GUI
 - Simulation

- Material
- Solenoid
- Website
 - Design
 - Permission difficulty

Pending issues

1. Website difficulties and updating
2. Materials and topics for presentation
3. COMSOL presentation 2

Plans for next week

1. Matt: Will finalize last simulations for this semester and prepare to present findings as well as presentation
2. Elizabeth: Will continue updating the website and prepare for presentation
3. Marion: Will perform measurements with Neelam and prepare for presentation

Individual Contributions (this week)

Matthew Mulloy: Attended the meetings, weekly reports, COMSOL simulation, project plan (7.5 hrs.)

Elizabeth Clarkin: Attended the meetings, fixed website, completed code functions, research into GUI, project plan (8 hrs.)

Marion Okoth: Attended meetings, Doppler Effect research, project plan (5 hrs.)

Total contributions for the project

Matthew Mulloy (77.5 hrs.)

Elizabeth Clarkin (89.5 hrs.)

Marion Okoth (66 hrs.)