

EE 491 Weekly Report DEC15-17 Week 4 (2/9/15-2/15/15)

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 goal this week was to put together our first draft of the project plan, to finalize our training, to update the weekly reports, and to start physical work on the project.

Meeting notes:

2/9 Group Meeting

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

- Discussed creation of project plan by the end of the week
- Discussed Gantt charts
- Discussed goals, deliverables, foreseeable challenges, and timelines in the project report
- Discussed holding another meeting every week with Neelam Prahbu to discuss technical problems not requiring the presence of Dr. Hadimani
- Photo requirement
- Measurement taking

2/12 Group Meeting

Duration: 30 min **Members Present:** Marion, Elizabeth

- Creation of Project Plan

2/13 Group Meeting with Advisors

Duration: 60 min **Members Present:** All

Purpose and Goals:

Discuss progress in design, discuss Gantt charts

- Discussed Gantt Charts, discussed better ways to implement information
- Creation of meetings with Neelam Prahbu
- Discussed Specifications of magnetic field generator
- Discussed Hysteresis loop and losses
- Discusses material planning, permanent magnets types, range of magnetic field strength

Pending issues

1. Gantt Charts need work
2. Understanding of MATLAB and requirements of the GUI
3. Which magnetic field generator to use

Plans for next week

1. Matt: Will design the permanent magnet option in COMSOL
2. Elizabeth: Will continue working on the website and continue working with MATLAB on the GUI for the software interface with the machine
3. Marion: Will continue testing materials, continue research into materials

Individual Contributions (this week)

Matthew Mulloy: Attended the meeting, research, COMSOL training, project plan, weekly reports. (11 hrs.)

Elizabeth Clarkin: Attended the meetings, website design, project plans, GUI (9 hrs.)

Marion Okoth: Attended meetings, research, measurement training, project plans (8 hrs.)

Total contributions for the project

Matthew Mulloy (27 hrs.)

Elizabeth Clarkin (27.5 hrs.)

Marion Okoth (31 hrs.)