

EE 492 Progress Report 6

MAY 15-26

Advisors: David Jiles and Ravi Hadimani

Client: Iowa State University/Magstim Company LLC

Members (roles): Jessica Staley (GUI/Leader), Saurabh Minocha (SEMCAD/Webmaster), Anqi Deng (3D Design & Modeling/Communication), Yixiao Shen (Comsol/Key concept holder)

Project Title: Design and Development of Adjustable Halo coil for Non-Invasive Treatment of Brain Disorders

Summary

The main goal this period was to finalize our project and test every part we have to make them work well. We also modified our final document and got our group website updated.

Meeting notes

04/22 Group meeting with advisor

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

04/24 Group meeting with group

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

04/25 Group meeting with group

Duration: 60 min

Members Present: All

04/28 Group meeting with advisor

Duration: 60 min

Members Present: All

Purpose and Goals:

We presented what we were to our advisor and asked advice for our presentation and demonstration thing. We also worked together to get our whole system setup and troubleshoot the issue we got during final testing. And we rehearsed our final presentation to our advisor to see if we have everything working well.

Achievements:

1. Submitted final document
2. Troubleshooted the issue during testing
3. Got simulation images

Contributions (individual)

Jessica Staley: Got the rotational actuator working and finished testing the bluetooth and wixel communications. Finished adding the simulation images to the GUI.

Saurabh Minocha: Finished SEMCAD simulations for rotations of -20,-25,-30 degrees.

Anqi Deng: Attended the meetings, help to troubleshoot the issue for the actuator movement, modified the system structure to a better stability mode, wrote progress reports and final document.

Yixiao Shen: Attend the meetings, give idea of the design. Receive the new structure from Lee and assemble that, got new problem with the modified structure, Send to Lee to modify again.