EE 492 Weekly Report|Dec15—02| Week 12 11/16/2015

Project Title: Human Dielectric Equivalent Model
Advisor: Jiming Song   **Client: Honeywell**
Members (roles): Stephen Nelson (Team Leader), Cory Snooks (Communications Leader/Webmaster), Andrew Connelly (Webmaster), Jacob Schoneman (Concept Holder).

Weekly Summary:

Worked on presentation and started working on the poster. Measured samples on the network analyzer and analyzed data. Spoke with Dr. Song about the values fitting the Z parameters vs Y parameters. Re-designed the network analyzer test fixture to minimize loop inductance. Researched and purchased a conductivity meter. Separated tissues by color in HFSS. The physical puck material was simulated in HFSS.

Meeting Notes:

Need to evaluate data compared against Z and Y parameters and investigate possible sources of error. We expect the Y parameters to be more accurate. The data is showing that the test fixture is acting like a loop inductor which is causing incorrect readings.

Pending Issues:

Testing materials and sorting through the results. Getting models working in HFSS.

Plans for Next Week:

Continue research, testing, and phantom construction. Continue to develop HFSS model. Start work on presentation poster and compiling the final report.

Individual Contributions (This Week):

Jacob Schoneman: 12 hours
Cory Snooks: 8 hours
Andrew Connelly: 23 hours
Stephen Nelson: 14 hours

Total Contributions for the Project:

Jacob Schoneman: 168.5
Cory Snooks: 174
Andrew Connelly: 173.25
Stephen Nelson: 218.5