EE 491 Weekly Report |Dec15-02| Week 6 3/2/2015

Project Title: Human Dielectric Equivalent Model

Advisor: Jiming Song

Client: Honeywell

Members (roles): Jacob Schoneman (Team Leader), Cory Snooks (Communications Leader), Andrew Connelly (Webmaster), Stephen Nelson (Concept Holder).

Weekly Summary:

The team started researching materials that can be used to mimic human body properties. A body mold was made. We tested the electrical properties of 3 cups of gelatin and found that we can pass a sine wave through it with very little degradation of signal. Andrew took over the software side of the project and researched different models to use.

Meeting Notes:

The team clarified that the client wants a physical model with 75% or greater accuracy when compared to actual human properties. We are allowed to constrain the desired frequency ranges if it means producing a more accurate model. The model should last at least a couple of weeks. The model can have leads placed in each wrist for now. We need to run the UT Austin's model in HFFS.

Pending Issues:

Need to research material to use for the frequency bands of interest. Finding materials that are accurate and will not deteriorate.

Plans for Next Week:

Meet with advisor on 3/2/2015. Meet with group on Thursday. Continue with materials research.

Individual Contributions (This Week):

Jacob Schoneman: 6 hours Cory Snooks: 6 hours Andrew Connelly: 7 hours Stephen Nelson: 6 hours

Total Contributions for the Project:

Jacob Schoneman: 23 hours Cory Snooks: 24.5 hours Andrew Connelly: 22.25 hours Stephen Nelson: 27 hours