

EE/CprE/SE/CYBE 491 WEEKLY REPORT 06

3/7/2022 - 3/13/2022

Group: 07

Project: Wireless Energy Harvesting

Client: Dr. Jiming Song

Team: Benjamin Brown, Christopher Marting, Greg Schmitt, Jacob Walczak, Sam Runkel, Tanner Garity

Weekly Summary:

During this week we ordered our first test board through ETG. We had an advisor meeting to make sure we had everything in order before we went on spring break and allowed enough time for our board to come in. Once we have the testing board we will be able to start running tests and experimenting with antennas and dc outputs.

Weekly Accomplishments:

Benjamin Brown - Had a team and advisor meeting with Dr. Song. Currently waiting on the board to come in after spring break to start our testing phase.

Christopher Marting - Met with Dr. Song to discuss where we were at with the project, as well as a team meeting to discuss future plan and I showed the team the simulated Yagi antenna I designed. We are currently in the process of waiting for ordered items to arrive before real progress can be made.

Sam Runkel - Had meeting with Dr. Song to discuss our progress so far and ask some antenna questions. Also had a team meeting where we discussed Yagi design, testing ideas and how to design an RF to AC and AC to DC converter. We are currently waiting for our board to arrive.

Jacob Walczak - Met with Dr. Song to discuss the progress so far and ask some questions about our Yagi uda antenna design. We also discussed moving forward in the project.

Tanner Garity- Caught up on the research conducted by my other team members. Refreshed my understanding of radar signals and antennas. Explored the theory behind Yagi-Uda calculations. Revisited Yagi-Uda design specifications and simulation techniques. Since our team settled on a board to purchase I commenced to enter part parameters in cadence virtuoso in order to begin simulating the results.

Greg Schmitt - Met with Dr. Song as a team to report on progress, as well as make plans for our next steps after we get back from spring break.

Plans for upcoming week:

1. Wait for test board to be delivered

Individual contributions:

Name	Individual Contributions	Hours this week	Hours cumulative
Benjamin Brown	<ul style="list-style-type: none">● Team meeting-1hour● Advisor meeting - 0.5	1.5	17.5
Jacob Walczak	<ul style="list-style-type: none">● Team meeting - 1 hr● Advisor/Client meeting - 0.5 hrs	1.5	18.5
Greg Schmitt	<ul style="list-style-type: none">● Team meeting - 1 hr● Advisor meeting - 0.5 hr	1.5	17.5
Christopher Marting	<ul style="list-style-type: none">● Team meeting + advisor meeting - 1.5hr	1.5	19
Sam Runkel	<ul style="list-style-type: none">● Team meeting and advisor meeting - 1.5hr	1.5	17.5
Tanner Garity	<ul style="list-style-type: none">● Updated my knowledge of radar antennas and signals - 0.5 hrs● Explored Yagi-Uda calculations and design/simulations strategies - 1.5 hrs● Started the preliminary steps of simulation - 1 hrs	3	19