

EE/CprE/SE 491 BI-WEEKLY REPORT 2

1/20/20 – 2/2/20

Group number: 18

Project title: Magic Door Sensors

Client &/Advisor: Daji Qiao

Team Members/Role:

Mitchell Bratina/ Project Plans Engineer

Calvin Christensen/ Engineering Activities Director

Isaiah Exley-Schuman/ Reports and Documentation Management

Collin Kauth-Fisher/ Conflict Resolution and Server Management

Joseph Kueny/ Meeting Facilitator

Summary: In the past 2 weeks we have taken on roles and begun work on our project. We hashed out a general concept for gathering power, opting for an active door sensor based on backscatter RF power. After meeting with Daji, we refined our requirements and goals for the project and have a parts list ready to order for initial testing.

Past week accomplishments: We chose a design by which to implement our door sensors and selected components for initial testing.

Pending issues: Performance testing of initial components is dependent upon component delivery.

Individual contributions:

Name	Contributions	Hours this period	Hours cumulative
Mitchell Bratina	Assisted researching for parts list.	12	24
Calvin Christensen	Researched part for the parts list and the properties of the power harvester Reciver 915 MH	12	24
Isaiah Exley-Schuman	Assisted in finalizing parts list items and prepared submission materials.	12	24
Collin Kauth-Fisher	Started setting up backend server platform. Edited the team webpage with bio data.	12	24
Joseph Kueny	Researched power collection and data sending of the door sensor.	12	24

Comments and extended discussion: N/A

Plans for the upcoming weeks: Each member will focus on contributions to the design document. Parts will come in and team members will begin testing.

Summary of weekly advisor meeting: We talked about the parts list and what we need to order. Daji sent us an email with contact information to some of his students that are working with a similar wireless power technologies. He sent us a link to a previous senior design group that worked on power over Wi-Fi. And he gave us a couple Raspberry Pis.