Team Name: sdmay21-sddec21-09

Team Members: Ryan Lanciloti, Ben Pierre, Chinar Kaul, Alyssa Marshall, Jared Hermon,

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Report Period: March 01 - March 15

Summary of Progress in this Period

We have come to a decision to do antenna design for the door sensor module. We will research different shapes and sizes of both the magnet and pieces of metals to achieve the magnetic field needed for this project. We have completed the first version of the design document.

Pending Issues

In terms of issues we have a clear path as to how we wish to proceed. We have made decisions on all the key points of our project, and while this will likely change there are currently no big decisions to make.

Plans for Upcoming Reporting Period

We will start deploying code beyond the ESP-IF examples, and hopefully begin harvesting CSI preambles. Now we should begin deploying and do more research on antenna design so we can understand it, and from there we can work to improve it. We will research different shapes and sizes and arrangements of the metal and magnet and decide the best three designs. We are going to try to obtain a gaussmeter to do independent testing. Once the circuit is established we should integrate our antenna design into the CSI system and do testing with the different antenna designs.