Tyler McKean

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ENGIN 435 – Antenna Design

Preliminary Topic Selection

For the final project, I was thinking of working with my classmate Zack Garnes on a project involving the signal strength of Wifi in a user’s household. We would like to be able to simulate a household environment and be able to detect the dead zones in the signal based off the parameters of the home the Wifi is installed in. I’ve used an iOS application before that tests the signal strength of the Wifi the device is connected too, which would be a useful tool I the project. Zack was also mentioning being able to model the reception of a Wifi signal using GNUradio, which I have had previous experience using as well. I’m sure our analysis could also be performed using MATLAB too. In addition, I think we could also explain the purpose and functionality of a Wifi range extender, which I use because of the poor reception I get from my own Wifi in my household. We both think our final project for the class could encompass these subjects and make for a very informative subject matter.