DIY Summer Project

1. Title of your DIY Project:

Wifi Navigation

2. Clearly spells out what question your small data project will answer.

How can I track and measure the location of a node on a wifi network?

3. How you will collect that data? Public data sets are not permitted. You much collect your own data!

Data will be collected using hardware in an IOT type of situation. Devices will pass along pings/beacons and the timing will be used to keep track of the loaction.

4. What hardware will be required and how will you get any needed hardware (including borrowing from the lab if needed)?

Raspberri Pi (2 and 4), old cell phones (2), current cellphone (1), communicate with each other over a wifi network. How? Yet to be determined.

5. A very preliminary guess or outline of how you might display and analyze the small data you collect.

This will be done in phases.

Phase One: Raw data points to terminal screen

Phase Two: Distance of a node in relation to the group owner (master/controlling node)

Phase Three: GUI (Graphic User Interface) live view, debating whether it be in web, mobile, or application form