**Setting up Nick’s Wifi script and running Pi boot up**

**Step 1: Create a file folder directory on the Raspberry Pi 3 (transponder) and Zero (tool).**

Transponder: "/home/pi/Hub/Memory/HubMemory"

Tool: "/home/pi/Documents/tooldump”

**Step 2: Copy and paste the *wifi\_transponder.py* script in “**/home/pi/Hub” **directory.**

**Step 3: Open the script and change the following to your specific settings.**

* **MAC = 0** , I use this for debugging purposes, make sure it is set to 0
* **Password = ‘nick’** , enter your Raspberry Pi Zero (tool) password
* **IP\_Tool** and **IP\_Transponder**, enter these accordingly
* **Memory\_name,** enter the name of the tool memory file

Note: I assume there is an actual file called Hub\_Memory.csv in the tooldump folder, for transferring actual tool data.

**Step 4: Generate an EDSA key for hub and tool.**

First time login and authentication require a key generation. In the transponder terminal, run the following code for:

ssh-keygen -R your\_tool\_IP\_address

ssh-keygen -R your\_hub\_IP\_address

ex: ssh-keygen -R 192.168.0.29

**Step 5: For running on boot, do the following from the Terminal:**

sudo nano /home/pi/.bashrc

scroll down to the bottom and insert this as the last line**:**

sudo python3 /home/pi/Hub/wifi\_transponder.py

hit control + x

Y to save

Enter to confirm and exit

The script runs automatically when the terminal is opened OR when Pi is reset, the script will run continuously. To verify if it worked, check the folders to see if the flag.csv file is gone and the Hub\_Memory.csv file has been updated (right click and see Properties, last updated)

The flag.csv file must be created and put in the "/home/pi/Hub/Memory/HubMemory" directory. It will be deleted and sent to the tool within seconds.

**Note: If you want to terminate the script running in the background, enter this in terminal:**

sudo pkill -9 -f wifi\_transponder.py

Note2: If the scp commands says permission denied, it may be a read/write/excecutable problem. Either use chmod to change permissions, or delete and re-create the folder/file