# Raspberry Pi connect Bluetooth beacon tutorial

## Setup the beacon devices.

* 1. Minew

<https://filesharecpsl.s3.amazonaws.com/MiniBeacon+Instructions_MiniBeacon_2.06.pdf>

**BeaconSET:** mobile app to config directly.

**Make sure you can find your beacon devices through the each APP first!**

## Setup Raspberry Pi

Just insert the default SD card. There is already Respbian OS in it.

We start from here:

<https://projects.raspberrypi.org/en/projects/raspberry-pi-setting-up/3>

Set correct **location and time zone.** You can skip WiFi and update.

**Note:** Please set the password: cpsl

**Enable SSH and set hostname:**

**Note:** You need to **enable SSH (in start/Preference/ Pi configuration/ Interfaces)**

**Note:** Please change the **hostname**: “cpsl-bbct-{index}”, e.g., “cpsl-bbct-001” to “cpsl-bbct-999”

**Note:** you need a reboot

## Connect to WUSM-secure

**Copy following zip and run to set up the WiFi (WUSM-secure):**

Using a U-disk you will find great ease!!!

<https://filesharecpsl.s3.amazonaws.com/pi_install.zip>

unzip pi\_install.zip

cd pi\_install

chmod +x \*

sudo ./setup\_wifi.sh

Make sure the WiFi is connected after running the script.

## Install our ble\_scan software (Need the WiFi connection)

cd pi\_install

Extract all the files into Raspberry Pi in folder “bbct”, then go the folder:

sudo ./install\_from\_github.sh

All the requirements will be auto installed by this script, and it will also setup the background service to collect all beacons and store into database.

**Note:** you can ssh into your pi to check the program log by:

**Your computer needs to connect to WUSM-**secure with

identity="ENGR-SVC-BLE\_TRACK@wustl.edu"

ssh pi@cpsl-bbct-\*\*\*.wusm-wifi.wucon.wustl.edu

sudo journalctl -fu ble\_scan

Make sure there is no error showing in the log, and you can see your beacon messages.