

Install VirtualBox

<https://www.freecodecamp.org/news/how-to-install-ubuntu-with-oracle-virtualbox/>

In this website they got link to Ubuntu make sure you download Ubuntu desktop iso

Install python3 in VirtualBox

<https://phoenixnap.com/kb/how-to-install-python-3-ubuntu>

Installing bluepy (Internal Comms):

```
sudo apt-get install -y python3-setuptools
```

```
sudo apt-get install git build-essential libglib2.0-dev
```

```
git clone https://github.com/IanHarvey/bluepy.git
```

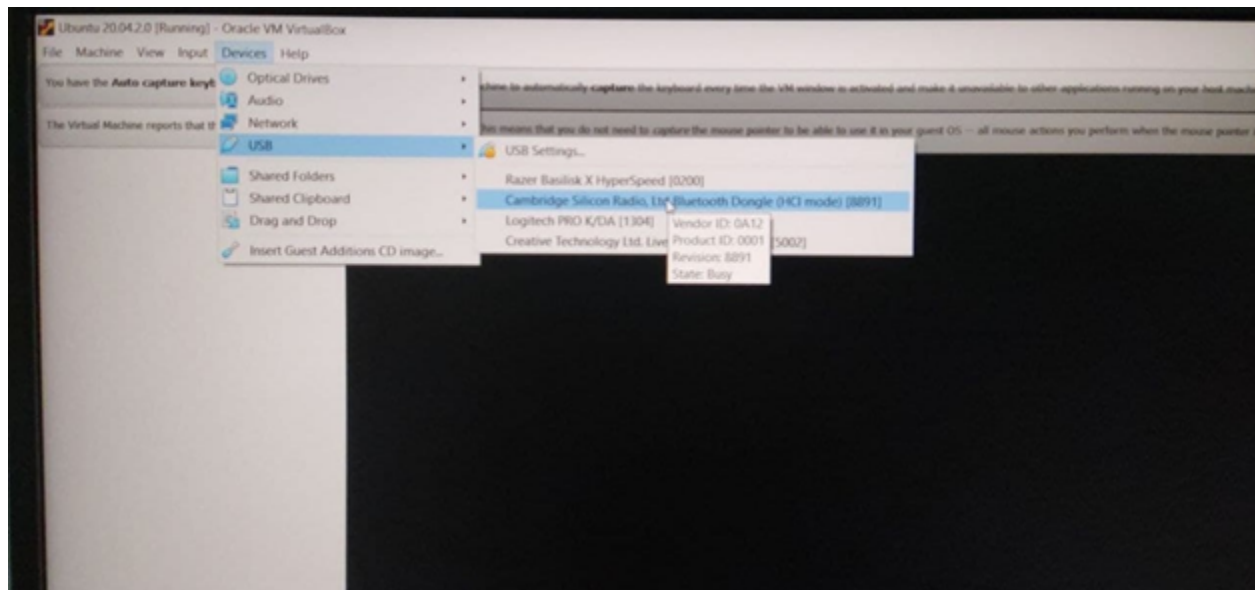
```
cd bluepy
```

```
python3 setup.py build
```

```
sudo python3 setup.py install
```

Attach your PC Bluetooth to VirtualBox:

This should be your Bluetooth device. Most likely is Intel



Cloning Comms Repository and setting it up:

- 1) If you do not have git - sudo apt install git-all
- 2) If you do not have vim - sudo apt install vim
- 3) git clone <https://github.com/theopin/laptop-comms-scripts.git>
- 4) a) Transfer .env file into the newly created ./laptop-comms-scripts directory
 - 1) vim .env
 - 2) Add the following data into the file exactly. Refer below for additional notes on the particular fields to update

```
SECRET_KEY_PASSPHRASE='CG4002DEMOGRP_14'
USER_ID='username'
HAND_BEETLE_MAC = 'hand_beetle_mac'
LEG_BEETLE_MAC = 'leg_beetle_mac'
IS_USING_EMG = '0'
```
 - 3) Save the file
- 5) Install the required dependencies for the external comms

Replace username with the following based on your name:

Shuyi - shuyi

Steve - steve

Wei Siong - weisiong

Theodore - theodore

Ningmou - ningmou

Harry - harry

Replace hand_beetle_mac and leg_beetle_mac based on the beetle numbers you are holding.
If you only have 1 beetle, set leg_beetle_mac to 11:11:11:11:11 temporarily

Installing Dependencies (External Comms)

- 1) sudo apt-get install -y python3-ntplib
- 2) sudo apt-get install python3-pip
- 3) sudo pip3 install python-dotenv
- 4) sudo pip3 install paho-mqtt
- 5) sudo pip3 install pycryptodome

Updating the repository

- 1) `cd laptop-comms-scripts`
- 2) `git pull`