User Manual Peekaboo Cam

**How to start with Peekaboo Cam?**

Step 1: Connecting to the wifi, called ‘**Peekaboo**’

Password: **boxeslittleboxes**

Step 2: Access to the Peekaboo from terminal on your computer (Mac/Linux), on Windows use PuTTY (<https://www.putty.org>)

ssh pi@192.168.4.1

password: **raspberry**

Step 3: Every time you turn on the Peekaboo house, remember to adjust the time first from your computer, after doing step 1 and 2:

sudo date -s ‘2019-04-25 09:30:00’

(Every time you turn off the Pi, the time needs to be adjusted again.)

**How to program the ESP32s to send data to the Peekaboo Cam?**

Step 1: Download from Canvas:

**Files/PeekabooCam\_Tutorial/ESP\_sensors\_connecting to Peekaboo/module1.ino**

**Files/PeekabooCam\_Tutorial/ESP\_sensors\_connecting to Peekaboo/module2.ino**

Step 2: Copy the file on the ESP board (using the Arduino IDE with the OOCSI-ESP library installed). And then it will automatically send the data to the PeekabooCam.

The example code will only send random data to the house, you job is to connect sensors and send sensor data to the house.

**How to trigger and control the Peekaboo Cam?**

Step 1: Download from Canvas:

**Files/Remotely Control Peekaboo/ Peekaboo\_datagen.pde**

Step 2: If necessary, download Processing (<http://processing.org>) & install the library, oosci\_processing, in Processing.

Step 3: Run the program. You can see a white canvas, and can press to control the function:



Step 4: Copy the code labeled “trigger photo” or “raiseflag”, or “down flag”) to your ESP.

Looking at the code that send the camera and flag controls to the Peekaboo house, you can also design the trigger for the sensor modules.

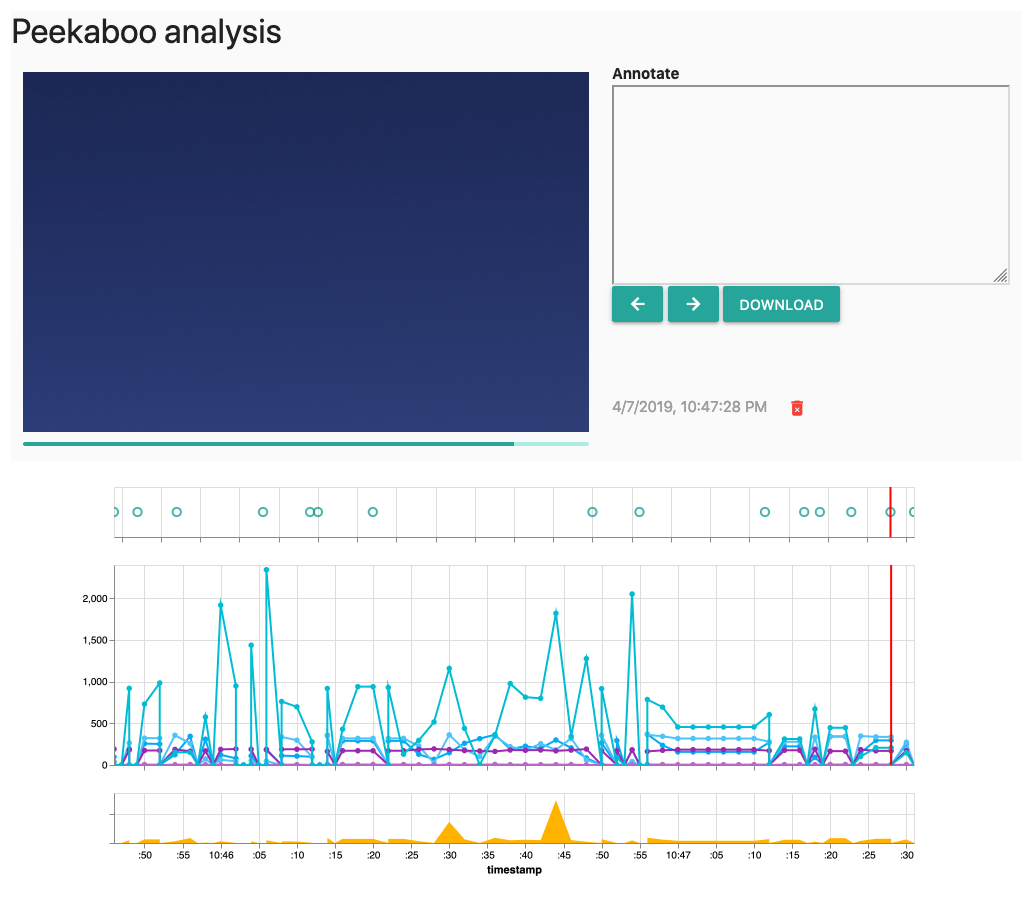
**How to make data visualisation?**

Step 0: Connect to Peekaboo Wifi

Step 1: Open Browser, access: <http://192.168.4.1>

Step 2: You can annotate the data, and even delete photos.

Step 3: Remember to ‘download’, otherwise it won’t save your annotations and your data.



**Attention: The interface will not store the actions on the Peekaboo house. You need to download the data (sensor data, annotations, photos) using the Download button.**

**How to reset the Peekaboo Cam?**

Step 1: Use the program from Canvas:

**Files/Remotely Control Peekaboo/ Peekaboo\_datagen.pde**

Step 2: Uncomment the lines in the **setup** function.

Step 3: Run the program, which will reset the Peekaboo Cam.

Step 4: Comment the lines again, so you don’t accidentally reset the Cam.

A D V A N C E D

Only do this VERY carefully and with a minimum knowledge of Python. Make backups. We will not fix your Peekaboo house if you break it.

**How to edit the behavior of the flag and the shutter block?**

Step 1: connect to Peekaboo wifi

Step 2: Access to the Peekaboo from terminal on your computer

ssh pi@192.168.4.1

password: **raspberry**

Step 3: In the home directory, type: nano timelapse/peekaboo.py

Step 4: You can find the code labeled by “shutter”, “flag”, you can edit the number of the rotation to the servo motor.