Raspberry PI Camera Motion Tracking and PATT Attestation Setup

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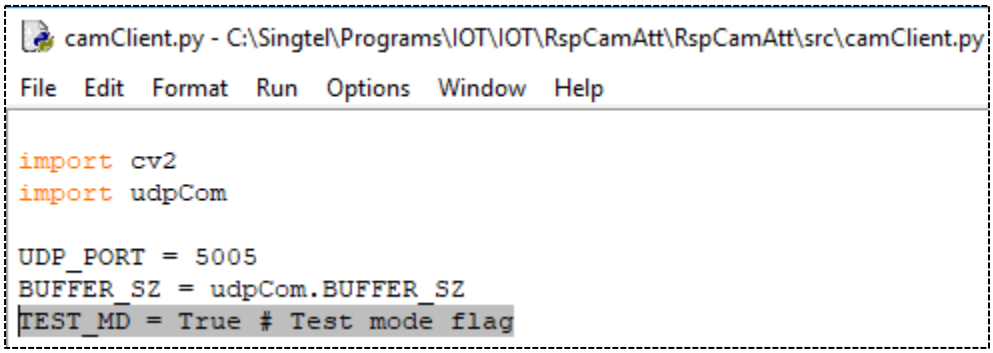
1. Setup Raspberry PI

1.1 Plug in the camera module and install the Opencv and dependency-lib by below cmd:

```
Raspberry PI install opencv:

sudo pip3 install opencv-contrib-python==3.4.3.18
sudo apt-get install libhdf5-dev
sudo apt-get install libatlas-base-dev
sudo apt-get install libjasper-dev
sudo apt-get install libqt4-test
sudo apt-get install libqtgui4
sudo apt-get update
```

1.2 Copy the **src** folder in raspberry PI. If you want to play the pre-saved video (my_video.h264), set the Test_Mode flag in file **camClient.py** to '**True**' :



1.3 Connect the Raspberry PI to your computer. Run the camera client by cmd:

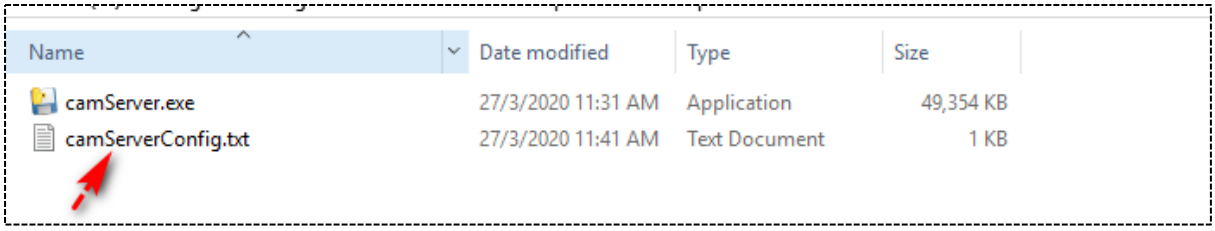
```
Python3 cameraClient.py
```

Run the patt checker client by cmd:

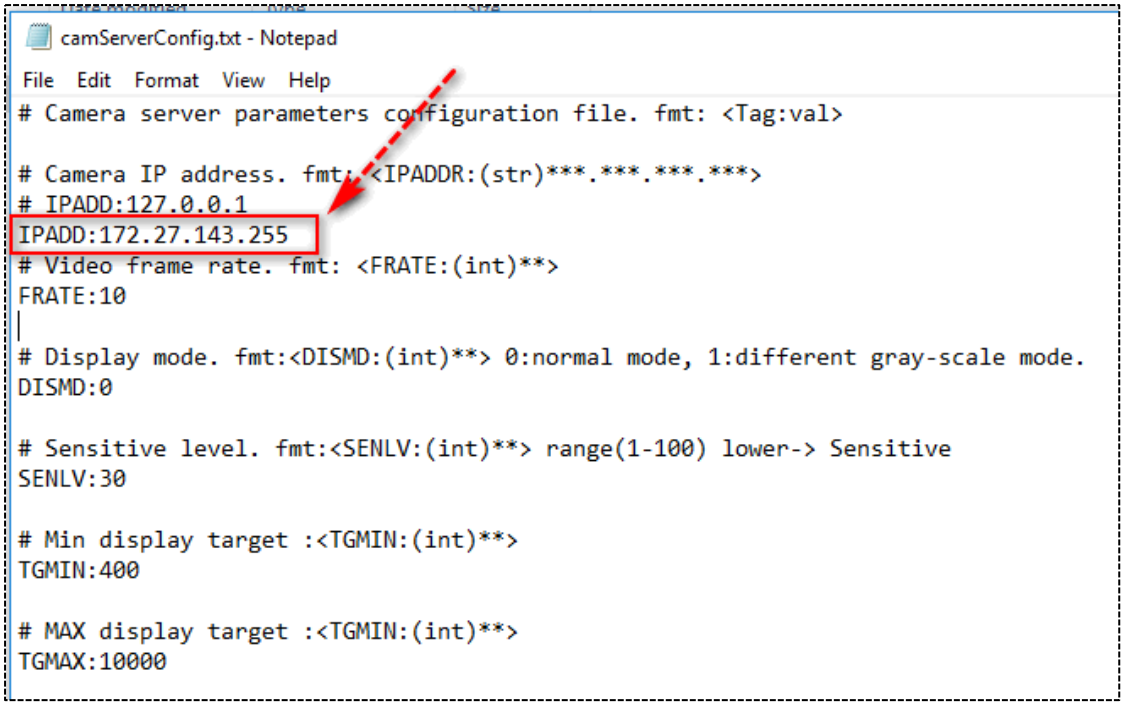
```
Python3 pattClient.py
```

2. Run the camera server to connect to the raspberry PI camera.

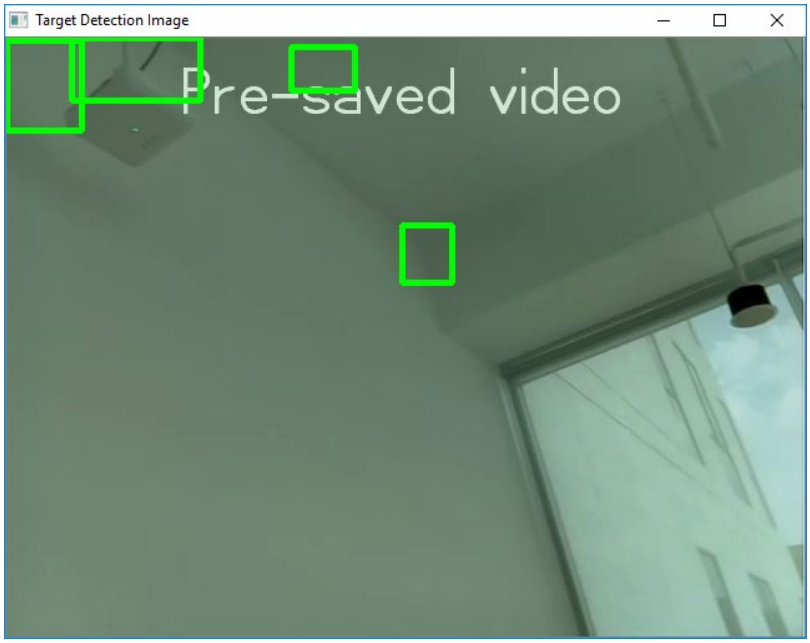
2.1 Open executable\camServer folder and open the config file **camServerConfig.txt**



Get the raspberry PI's IP address and set the IP address in the config file (replaced the IP in the marked line):



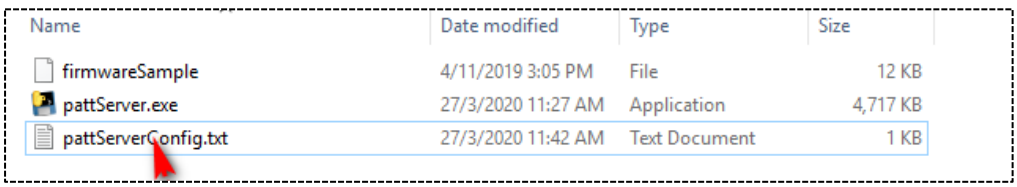
2.2 Save the config file and double click the **camServer.exe** file the camera window will show:



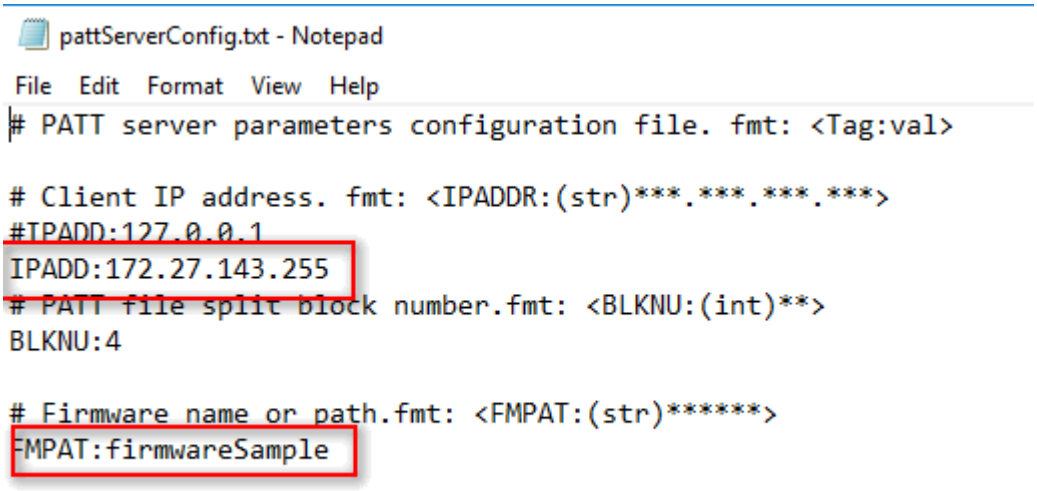
Press "**q**" button on the keyboard will quit the window.

3. Run the PATT attestation server.

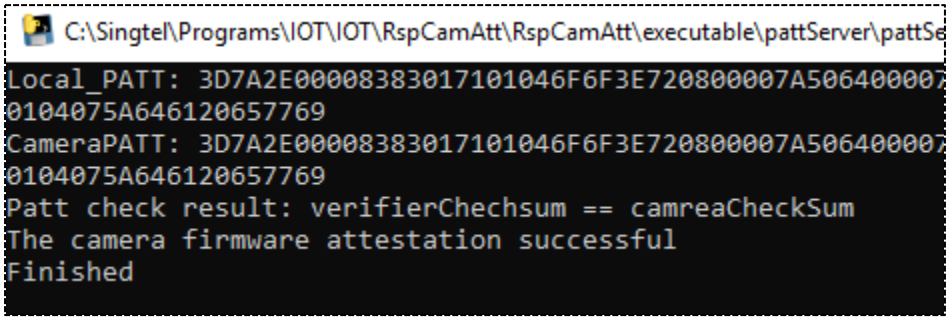
3.1 Open executable\pattServer folder and open the **pattServerConfig.txt** :



Get the raspberry PI's IP address then set the IP address and the firmware name/path you want to check in the config file:



3.2 double click the **camServer.exe** file the patt check result will show:



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