

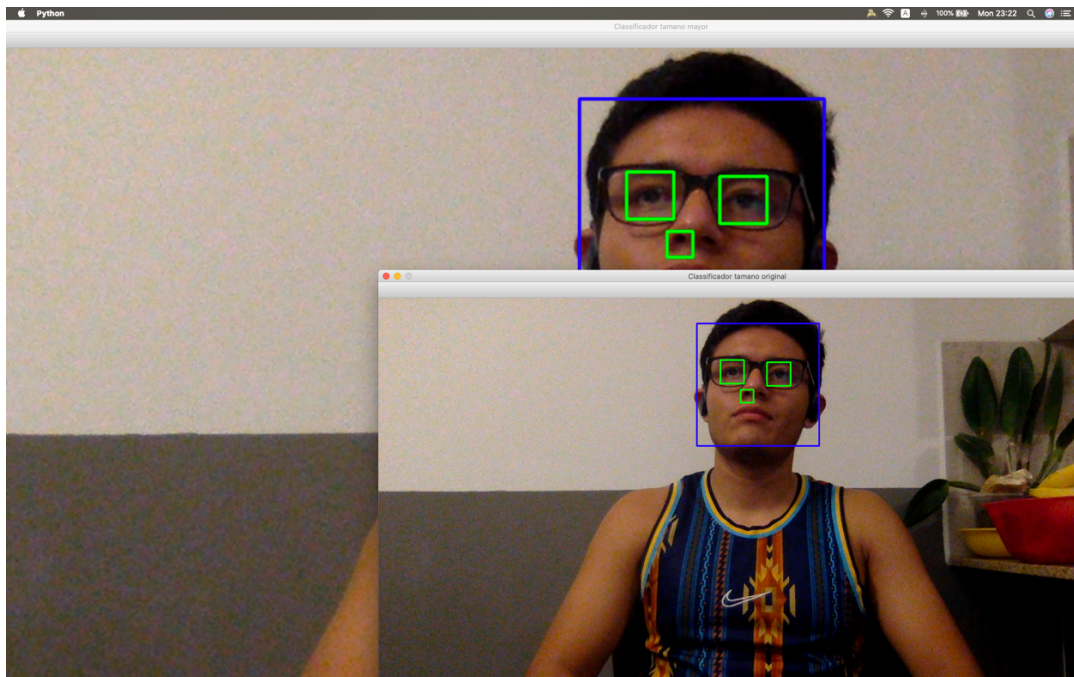
## Practica 3.1

- 1) Implement a script that calculates either "Haar Features" and/or HOG, or any other descriptor on an image.
- 2) Then apply on the features obtained the Sliding pyramid window algorithm.
- 3) For every sample:
  - Save the original fragment of the image.
  - Pass from Matrix to Vector the corresponding elements of the obtained characteristics and save them in the format or data structure that you think is appropriate.

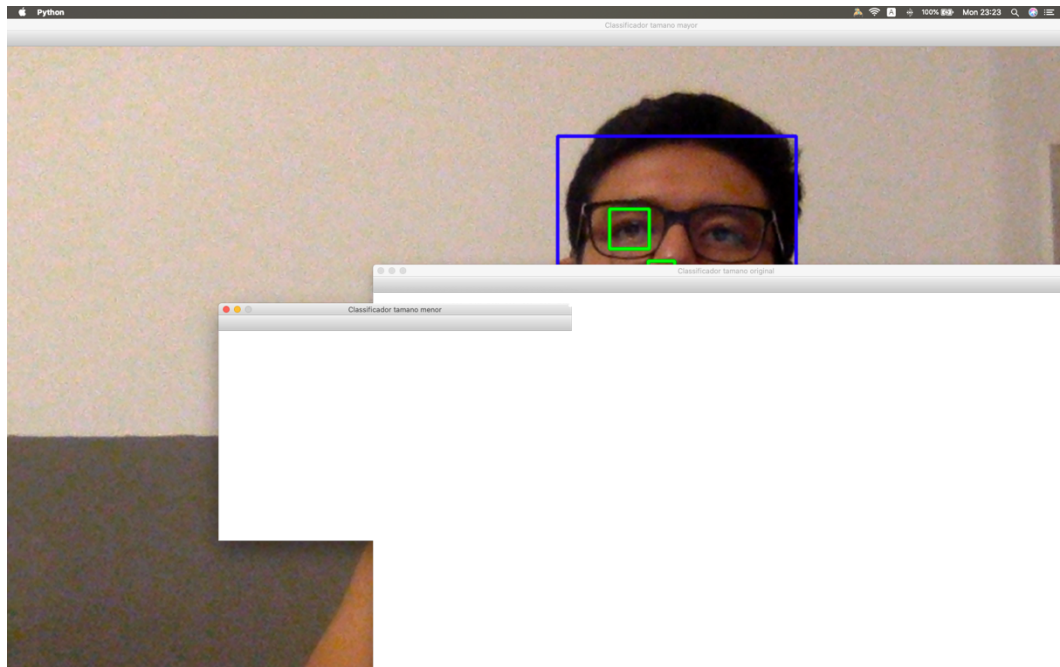
1 & 2)

Había una imagen mas pequeña pero no lo dejaba imprimir en captura de pantalla ☹

### Pyramid Upper and Normal Image



## Lower, Upper and Normal images



### 3.) Images saved in a file as Vectors

```
→ 07 git:(master) x ll
total 2608
-rw-r--r-- 1 memoherrera staff 333K Nov 2 23:04 haarcascade_eye.xml
-rw-r--r-- 1 memoherrera staff 908K Nov 2 23:04 haarcascade_frontalface_default.xml
-rw-r--r-- 1 memoherrera staff 1.9K Nov 2 23:32 imagenes.txt
-rw-r--r-- 1 memoherrera staff 1.5K Nov 2 23:32 practica3_1.py
→ 07 git:(master) x
```

```
vim (vim)
magen original:
[[[176 179 202]
[184 188 210]
[182 188 210]
...
[127 139 145]
[127 145 153]
[124 143 150]]
[[[183 186 209]
[186 190 212]
[184 190 212]
...
[129 142 147]
[127 145 153]
[125 144 152]]
[[[186 187 212]
[190 192 217]
[185 191 215]
...
[130 141 143]
[126 140 148]
[128 143 150]]
...
[[[ 24 53 66]
[ 23 52 65]
[ 29 54 67]
...
[ 0 0 1]
[ 0 0 4]
[ 0 0 1]]
[[[ 24 50 64]
[ 26 53 66]
[ 34 55 71]
...
[ 0 0 0]
[ 0 0 1]
[ 0 0 0]]
[[[ 23 49 63]
:set hlsearch 1,1 Top

vim (vim)
...
[[[ 0 0 0]
[ 0 0 1]
[ 0 0 1]]]
Imagen tamaño menor:
[[[184 187 210]
[184 189 211]
[181 190 210]
...
[131 145 147]
[129 142 146]
[127 143 150]]
[[[187 189 213]
[186 191 214]
[182 190 213]
...
[132 144 145]
[130 142 144]
[127 141 147]]
[[[188 189 212]
[185 190 214]
[181 191 216]
...
[135 143 147]
[135 144 145]
[130 140 145]]
...
[[[ 38 57 67]
[ 43 57 67]
[ 45 55 68]
...
[ 0 0 0]
[ 0 0 0]
[ 0 0 0]]
[[[ 30 56 68]
[ 32 54 66]
[ 36 52 65]
...
85,1 42%

vim (vim)
...
[[[ 0 0 0]
[ 0 0 0]
[ 0 0 1]]]
Imagen tamaño mayor:
[[[179 183 205]
[181 185 207]
[183 188 210]
...
[126 144 152]
[125 143 151]
[124 143 151]]
[[[181 184 207]
[182 186 208]
[184 188 210]
...
[126 144 152]
[125 144 151]
[125 144 151]]
[[[183 186 209]
[184 188 210]
[185 189 212]
...
[126 144 152]
[125 144 152]
[125 144 152]]
...
[[[ 24 50 64]
[ 24 50 64]
[ 25 51 65]
...
[ 0 0 1]
[ 0 0 1]
[ 0 0 1]]
[[[ 23 49 63]
[ 23 49 63]
[ 24 50 64]
...
[ 0 0 1]
search hit B...inning at TOP 130,1 90%
```