

# **Project Report 2.**

## **Mikael Pratama Kristyawicaksono (S1241079).**

### **What I have done?**

- Aubio pitch and volume extraction.
- OpenCV face detection.
  - On computer.
  - On website.
- Reading 12 state of the art projects.

### **Problems.**

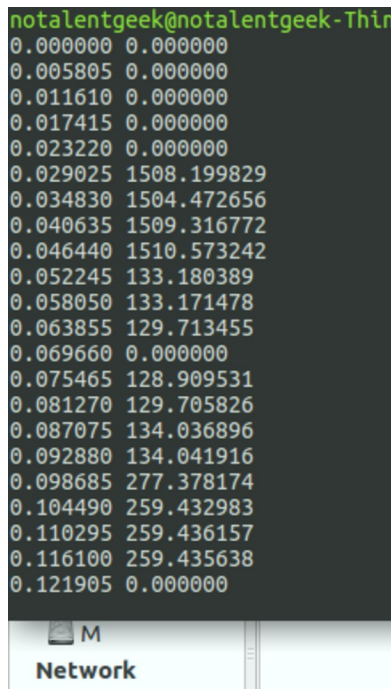
- The process is quite heavy, take quite long, around 5 seconds for Raspberry PI to capture photo, record sound from microphone, analyzing faces, and then analyzing sound from microphone.
- I have motivation issue to start writing the paper. But, I did write a lot of documents and papers and make a lot of summarizations from it. The reason was because I want to finish reading other papers (around 8 papers) before I start making my state of the art document.

### **Reflections.**

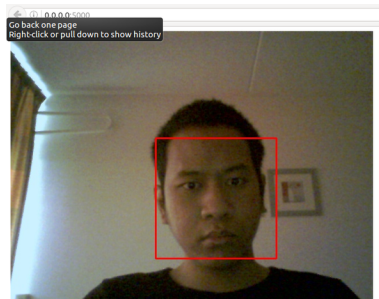
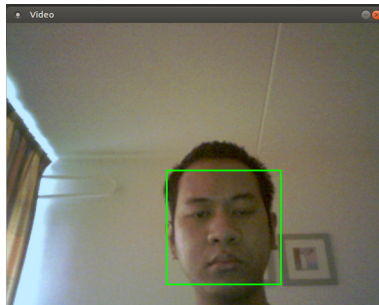
- Busy week.
  - Presentation.
  - Programming.
  - Reading.
- Perhaps I need to manage my priorities better and not to over promise things.

### **Screenshots.**

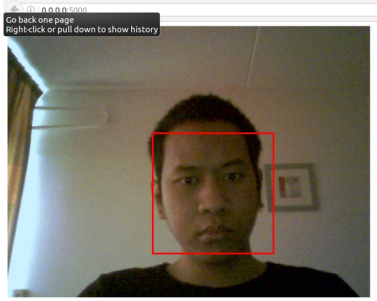
```
notalentgeek@notalentgeek-Thin
0.000000 0.000000
0.005805 0.000000
0.011610 0.000000
0.017415 0.000000
0.023220 0.000000
0.029025 1508.199829
0.034830 1504.472656
0.040635 1509.316772
0.046440 1510.573242
0.052245 133.180389
0.058050 133.171478
0.063855 129.713455
0.069660 0.000000
0.075465 128.909531
0.081270 129.705826
0.087075 134.036896
0.092880 134.041916
0.098685 277.378174
0.104490 259.432983
0.110295 259.436157
0.116100 259.435638
0.121905 0.000000
```



This is the example of the pitch detection. The left column is the pitch, while the right column is the volume. The input was from a .wav file. So I need to capture the audio first.



This is the example of face detection that compiled into native Linux application. The input is from webcam.



This is the example of face detection that is taken from web browser. This is currently server side. The input is from webcam.