

**Student:** Susana Ribeiro D'Eça

**Dissertation:** Vital Helmet – Towards a sensorized helmet for First Responders

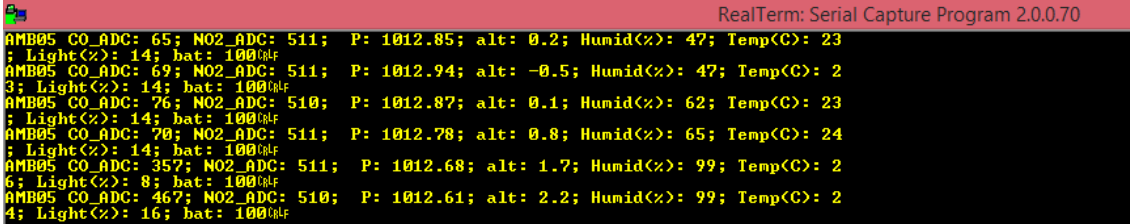
**Supervisor:** Associate Professor (with “Agregação”) João Paulo Cunha

**Week:** 11-05-2015 to 17-05-2015

## Development:

- Test the PCB;

## Results:



```
RealTerm: Serial Capture Program 2.0.0.70
AMB05 CO_ADC: 65; NO2_ADC: 511; P: 1012.85; alt: 0.2; Humid(%): 47; Temp(C): 23
; Light(%): 14; bat: 100%
AMB05 CO_ADC: 69; NO2_ADC: 511; P: 1012.94; alt: -0.5; Humid(%): 47; Temp(C): 2
3; Light(%): 14; bat: 100%
AMB05 CO_ADC: 76; NO2_ADC: 510; P: 1012.87; alt: 0.1; Humid(%): 62; Temp(C): 23
; Light(%): 14; bat: 100%
AMB05 CO_ADC: 70; NO2_ADC: 511; P: 1012.78; alt: 0.8; Humid(%): 65; Temp(C): 24
; Light(%): 14; bat: 100%
AMB05 CO_ADC: 357; NO2_ADC: 511; P: 1012.68; alt: 1.7; Humid(%): 99; Temp(C): 2
6; Light(%): 8; bat: 100%
AMB05 CO_ADC: 467; NO2_ADC: 510; P: 1012.61; alt: 2.2; Humid(%): 99; Temp(C): 2
4; Light(%): 16; bat: 100%
```

Fig. 1: Test blowing for CO sensor;

## Conclusions:

- As we can see in the figure above the sensor is working and the ADC of the pic is able to measure changes in the air;
- It is still need understand if this values make sense or not. After that, a calibration will be necessary;