Rui Filipe Santos Carapinha Computer Vision – Project Proposal

Face Recognition

* **Description**

My project proposal is a Face Recognition, the goal to load a photo to some database and then recognize a face of someone in a simple environment. The component of storing and analyzing the data is just to check we can have a proper function of the processor even when it spends the most part of the time sleeping.

* **Objectives**

The main objectives of this project are the Low Power Mode, Data log (save to a SD card values of temp., humidity, light, etc.) and a Matlab Interactive Interface to read and analyze the data.

It must, last a reasonable time with the battery, store correctly the values and have a proper analysis program.

I hope it last at least a month.

The main difficulties of this project will be to wake up the processor and turn back to sleep again.

* **Hardware and Software**

The hardware I will use is: ATmega328 (Arduino Uno with Detachable Processor to be easier to connect to computer and program), Temperature Sensor, Humidity Sensor, battery 3.3V, a microSD or SD card reader and RTC clock module.

The software I will use is: Matlab and C.

* **Sources**