**Image processing Project**

**abstract**

The purpose of this project is to count the actual number of people inside a room through detected images.

At the conclusion of this project we expect an evaluation of two or more Neural Network-based algorithms to evaluate their peculiarities.

We will try to choose datasets with a large number of people in outdoor and indoor environments. Thus increasing complexity by having a low resolution of the individual person and having many occlusions.

-The first algorithm analyzed will be a Fully Connected Neural Network

-Second algorithm Convolutional Neural Network.

**tools:**

Keras library

**sitography:**

<http://introtodeeplearning.com/>

<https://www.coursera.org/specializations/deep-learning>

<https://www.deeplearningbook.org/>

**papers**:

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8919725

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8406516

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8090827

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5279591

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5337461

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=5597473

https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=8933522