

AIC 2023/24

Final project (class+personnal work)  
**People counting in Depth images**

**Context (people counting application example based on conventional image processing):**

Citation from TI documentation

([https://drive.google.com/drive/folders/15r\\_k\\_72HvOIkbiHcujMEabaGFHWqY24D](https://drive.google.com/drive/folders/15r_k_72HvOIkbiHcujMEabaGFHWqY24D))

**Objective :**

To develop the application of people counting (indoor situation), based on Depth Data from Time of Flight sensor.

**Proposed methodology**

1. Study and understand the data (visualization, shape, and descriptors identification)
2. Try to apply some basic conventional approach (thresholding ?), understand the weakness and technological bottlenecks
3. Experiment some AI based technique to do this task (Yolo-like approach suggested - <https://pjreddie.com/darknet/yolo/>)

**Dataset acquisition, parameters, and description :**

Data to use in the project are here :

<https://drive.google.com/drive/folders/1wutQAKc6l8bhCPkPRk7AsWvBeC4EMxUG?usp=sharing>

**Ful dataset and specifications are here :**

<https://vizta-tof.kl.dfki.de/timo-dataset-overview/>

**You can access the complete dataset with these credentials :**

**user:** ED\_esiee

**psw:** ED\_esiee!

Warning: the dataset is very huge, and takes a lot of place on the disk. Within the project, we will consider only a small portion of the available data.