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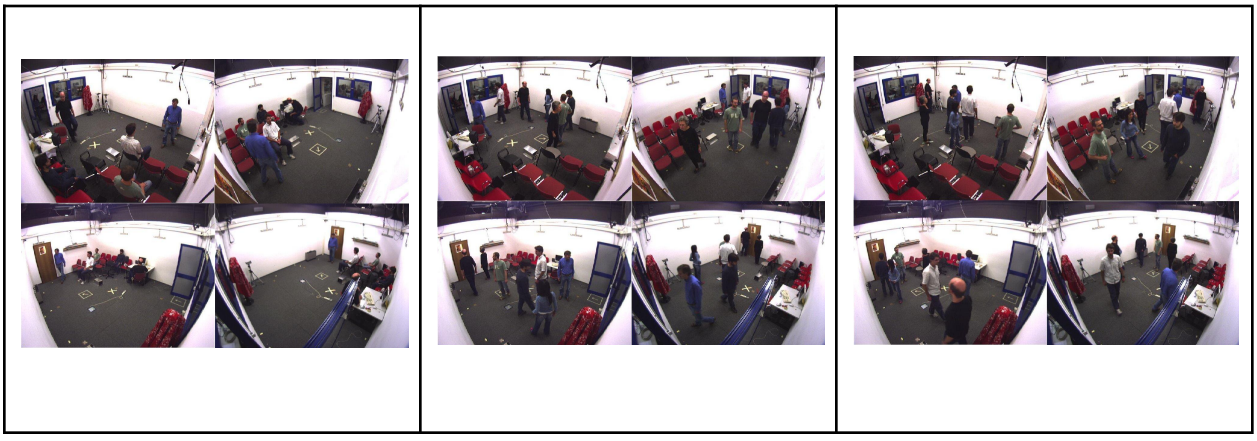
# Multi-View sequences for People Tracking

## about HALLWAY and LAB datasets

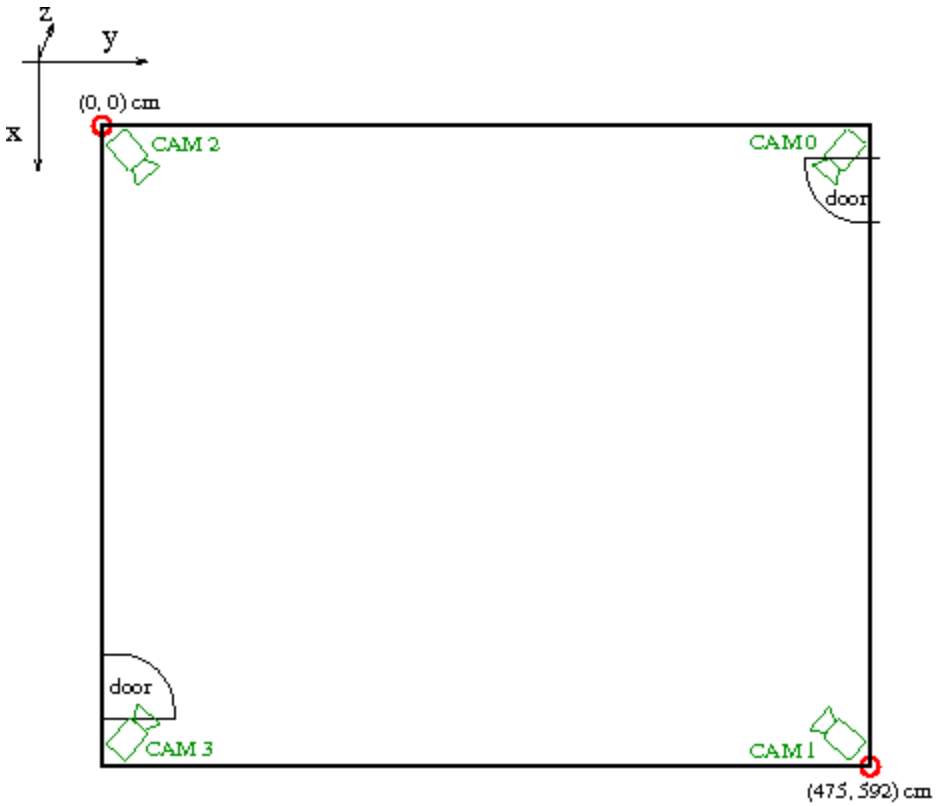
TASK-DECOMPOSITION contains two sequences: LAB and HALLWAY. The LAB sequence is about 3.5 minutes long, the tracking domain is about 5×6 meters in dimension, and the images were captured at 15 Hz with a resolution of 640x480 pixels taken in our lab, where four cameras are installed at the corners. Through the sequence, people enter, walk around, sit down and exit the room randomly, causing frequent occlusions. The maximum number of people in the scene at the same time is 7. The HALLWAY sequence was taken with four cameras in a large open space equipped with chairs, desks and poster walls. The cameras are distant about 15 meters one from the other, where people's bodies may appear in some views at resolutions as low as 15×60 pixels. The sequence is about 5 minutes long with people entering the area, moving, standing still, forming into groups and interacting with each other, sitting in chairs and leaving the area. The frame rate for the sequence is 15 and the resolution is 800×600 pixels. The maximum number of targets in the scene at the same time is 9. For both sequences the ground truth was labeled manually.



*Multi-view samples of LAB sequence*

*Multi-view samples of HALLWAY sequence*

Both TASK-DECOMPOSITION datasets come with camera calibration files: for each camera, we provide all the information needed to compute the image projection (pixel coordinates) of a 3D point. C++ code implementing this projection is provided.




*LAB Dataset - Room dimensions, ground coordinates, and camera positions*

Ground truth files are provided for the sequences which contain people's ground positions that were manually annotated.

## download TASK-DECOMPOSITION (HALLWAY and LAB datasets)

TASK_DECOMPOSITION datasets are provided for research or academic purposes only.

**1.** **HALLWAY dataset**

*HALLWAY sequence* [~2.4GB, 5mins @ 4x15Hz] with ground truth and README file.

Calibration files for CAM 1 CAM 2 CAM 3 CAM 4 computed using checkerboard pattern and OpenCV routines.

Simple c++ code to compute the image projection of a 3D point from the calibration files.

**2.** **LAB dataset**

*LAB sequence (aka Visor.tar.gz)* [~2GB, 3.5mins @ 4x15Hz] with ground truth and README file.

Calibration files for CAM 1 CAM 2 CAM 3 CAM 4 computed using checkerboard pattern and OpenCV routines.

Simple c++ code to compute the image projection of a 3D point from the calibration files.