Person Tracking

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How to use the code:

python main.py

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optional arguments:

-v VIDEO_PATH, --video VIDEO_PATH	Path for input video
-o OUTPUT, --output OUTPUT	Path for outputs directory
-m MODEL, --model MODEL	Path for models directory
-d, --show_video	If this option is used, output video will be displayed
-s, --save_video	If this option is used, output video will be saved

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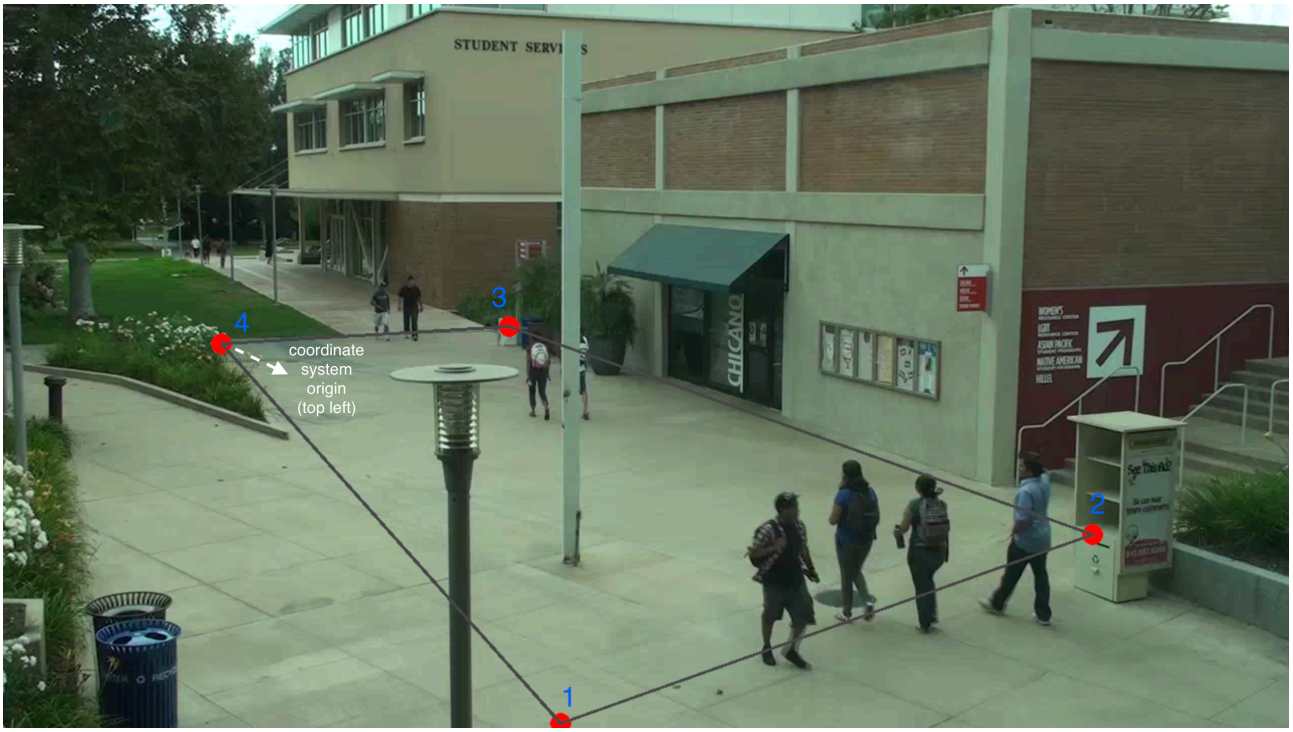
Perspective transform points:



* press “R” to reset points
* press “S” to save points and continue

JSON output format:

{

“person id” : {

“bottom_points”: [list of coordinates of person’s points in the main frame in (x, y) format]

“bv_points”: [list of coordinates of person’s points in the bird eye view frame in (x, y) format]

“times”: [list of times (in msec) of frames that this person appeared in them]

“head_poses”: [list of angles (in degree) of person’s head in (yaw, pitch, roll) format]

“genders”: [list of recognized genders for this person in different frames]

“ages”: [list of recognized ages for this person in different frames]

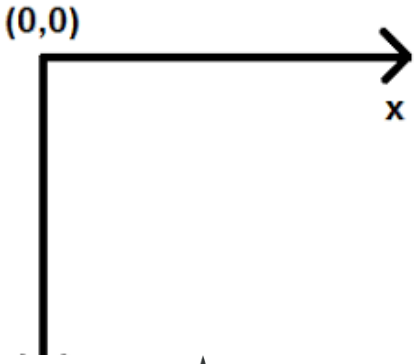
“gender”: this person’s gender based on “genders”

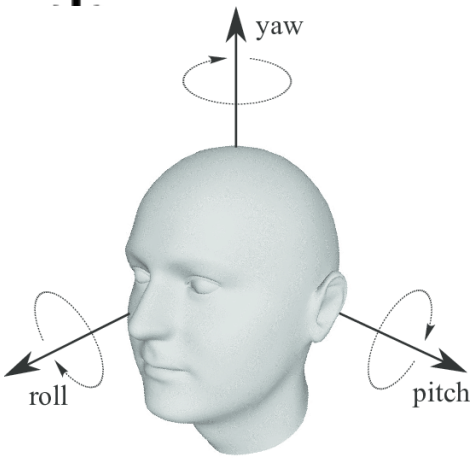
“age”: this person’s age based on “ages”

}

}

* coordinates are in normalized by width and height of frame
* coordinate system:





* head pose angles:
* list of possible gender: [“Male”, “Female”]
* list of possible ages: ['(0-2)', '(4-6)', '(8-12)', '(15-20)', '(25-32)', '(38-43)', '(48-53)', ‘(60-100)']