function statistical\_approach (person\_tracker, found\_persons, frame\_count)

*inputs: person\_tracker, keypoints mapped in previously processed frames*

*found\_persons, OpenPose output keypoints*

*frame\_count, index of the frame in the origin video (temporal)*

*actual\_persons* = empty list

*centers\_of\_mass* = empty list

for each *elem* in *found\_persons*

if validate\_person (*elem*) = true

append *elem* to *actual\_persons*

append center\_of\_mass\_for\_person (*elem*) to *centers\_of\_mass*

for *k* = 0 : length (*actual\_persons*)

append *centers\_of\_mass k*to *actual\_persons* k

append *frame\_count k* to *actual\_persons k*

append estimated\_height (*actual\_persons k*) to *actual\_persons k*

return map\_persons (*person\_tracker*, *actual\_persons*)