

Hi, Your profile has been short-listed!

As a next step, please complete the following task and send it back to us on or before **28th March, 2021**

COMPUTER VISION TASK

Problem Statement: -Detect people and track them throughout the view

Video Data: The following video contains CCTV data of people walking.

<https://www.youtube.com/watch?v=bmSDYqO8Dw>

Required Task:

1. Detect humans in the video
2. Assign an ID to each unique person
Note: The ID should not increase/decrease if the same person detected
3. Implement tracker on each person

Required Output:

1. Count of unique people
2. Count of unique people going left to right

Evaluation Criteria for tasks (Please provide a brief write-up with the following details):

1. Libraries used in code (Pytorch, OpenCV etc.)
2. Execution time of code (CPU and GPU division)
3. Code refactoring and optimization (OOPS concepts etc.)
4. Code scalability
5. In-memory computation of code in terms of time & space complexity
6. Data structures & algorithm and of code
7. Documentation and Visualizations (Code flow block diagram etc.)
8. training and testing accuracy on open-source data.

Note: Candidate should provide a short note about the dataset and method being used.