

K J's Educational Institute

K J College of Engineering and Management Research, Pisoli

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Project Title: Motion Detection & Multiple Face Identification using Python

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Abstract

According to Physics, when an object is motionless and has no speed, then it is considered to be at rest, and just the opposite is when an object is not at complete rest and has some movement or speed in some direction, then it is considered to be in motion. In this article, we will try to detect it.

Motion detection has many real-life implementations or usages where it can prove its worthiness, such as for invigilation of online exams using a webcam as a security guard, etc.

In this project, we will try to implement a script through which we will detect motion using the Web-Camera of the desktop or laptop. The idea is that we will take two frames of the videos and try to find differences between them. If there is some kind of difference between the two frames, then it is clear that there is some kind of movement of an object in front of the camera, which creates the difference. Also, we can use the idea of face detection to detect facial expressions like smile, sad, crying, depression, frustration, etc or detecting multiple faces in one single video frames and recognizing the people names according to their faces stored in database.