





## **Overview**

*Face Detection Attendance* - A face detection attendance system uses computer vision technology to automatically capture images of people's faces and match them against a pre-existing database to identify individuals and record their attendance. The system uses a camera to capture images of peoples as they enter a room or building, and then analyzes the images to identify each person's unique facial features. The system typically works by using a pre-trained deep learning model to detect and extract facial features, such as the distance between the eyes, the size and shape of the nose, and the contours of the jawline. These features are then compared against a database of pre-registered faces to identify individuals and their attendance. *Attention Detection* - Attention detection refers to the process of identifying where a person is looking in an image or video. To do so we are using a variety of techniques, including gaze tracking, head pose estimation, and facial landmark detection. The application tacking video from camera to track of person's eyes

in real-time, which uses a combination of deep learning and computer vision techniques to accurately predict where a person is looking in an image or video. And also read the various facial landmarks and calculate the attention level.

## **Features**

## → Face Detection

- → Auto Attendance
- → Gender Detection
- → Attention Level Check
- → Emotion Detection

- Benefits
  - → It can reduce the time and resources needed to manually check attendance, eliminate the need for paper-based systems.
  - → Provide real-time data on who is present in a room or building.
  - → The system can be used to prevent unauthorized access to sensitive areas, as well as to track the movements of individuals for security purposes.
- → Face detection attendance systems can be used in workplaces to monitor employee attendance, punctuality, and to track working hours. The system can also be used to restrict unauthorized access to sensitive areas within the workplace.
- → Face detection attendance systems can be used in banks and financial institutions to restrict unauthorized access to high-security areas, as well as to monitor employee attendance and punctuality. This can help prevent security breaches and unauthorized access to sensitive information.
- Attention detection technology can be used to monitor drivers' levels of alertness and detect signs of distraction or drowsiness. By analyzing eye movements and other physiological responses, the technology can alert drivers or autonomous vehicles to take corrective action to prevent accidents.
- → Attention detection can be used in educational settings to trace student attention and engagement, and to provide personalized feedback or assistance to improve learning outcomes.
- → Attention detection can be used in remote meeting, where host can know the audience attention.