

# Face Recognition at Varying Angles Using Support Vector Machine Algorithm

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**Abstract:** *Face recognition is process of detecting facial images in real time and identifying facial image. Detecting and recognizing persons face to authenticate by their Multiview angled face is a real valued problem in machine vision. Multiview faces are having difficulties due to non-linear representation in the feature space. Facial images in surveillance or cellular scenarios often have large view-point variations in terms of pitch and yaw angles. This makes facial recognition more challenging. The main objective of this project is to Build a face recognition system which can identify facial images at different angles. Identifying suspects whose faces may be partially visible due to the varying angles at which CCTV cameras are typically placed. Identifying suspects by analysing CCTV feeds even when frontal face has not been clearly captured is the key challenge to this problem statement. This face recognition model is able to identify both frontal face and profile face this problem can be achieved using support vector machine (SVM) algorithm.*

**Keywords:** Face recognition, Support Vector Machine, Face Detection.

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