

## Improvements in OpenCV's Viola Jones Algorithm in Face Detection-Skin Detection

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**Abstract :** This paper proposes a new improved approach for false positives filtering of detected face images on OpenCV's Viola Jones Algorithm. In this approach, for filtering of false positives, skin detection in two colour spaces i.e. HSV (Hue, Saturation and Value) and YCrCb (Y is luma component and Cr- red difference, Cb- Blue difference) is used. As a result, it is found that false detection has been reduced. Our proposed method reaches the accuracy of about 98.7%. Thus, a better recognition rate is achieved.

**Keywords :** face detection, Viola Jones, false positives, OpenCV

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