

LBPH ALGORITHM (LOCAL BINARY PATTERNS HISTOGRAMS)

Local Binary Pattern (LBP) is a simple yet very efficient texture operator which labels the pixels of an image by thresholding the neighborhood of each pixel and considers the result as a binary number.

It was first described in 1994 (LBP) and has since been found to be a powerful feature for texture classification. It has further been determined that when LBP is combined with histograms of oriented gradients (HOG) descriptor, it improves the detection performance considerably on some datasets.

Using the LBP combined with histograms we can represent the face images with a simple data vector.

As LBP is a visual descriptor it can also be used for face recognition tasks, as can be seen in the following step-by-step explanation.