Research in the field of facial expression recognition has been primarily applied to datasets which has images that have been clicked from almost in-front of the face or the front view of the face. In many scenarios, the frontal image of the face is not always available. In recent times, building classification techniques for non-frontal facial images has attracted the attention of many researchers. Quite a few attempts to make such classifiers have been made so far. However, most of these attempts have considered image angle variations of up to 45 degrees only. This is because of the unavailability of suitable databases. A few datasets like KDEF and multi-pie have emerged in recent days, which have encouraged researchers in this field to perform extensive experiments. Two variants of LBPs are applied to images to extract feature vectors. Three methods are used to classify the images based on expressions. Image is divided into a number of blocks. Feature vector is created by concatenating histograms computed from each sub-block. Multiclass support vector machines are used to learn facial expressions.

In this paper, we consider two variants of LBPs for facial expression recognition using non-frontal facial images namely LGBP and DCLBP. By analysing different variants of a LBP, we can understand the importance of feature representation in multi view facial expression recognition.