**ABSTRACT**

The process of identifying and recognizing the criminal is the time consuming and difficult task. There are several ways to identify culprits at the crime site, including fingerprinting, DNA matching, and eyewitness testimony. The criminal face identification system will be built on a existing criminal database. The method for identifying a human face using features extrapolated from an image is presented in this study. This paper presents a methodology for recognizing the human face based on the features derived from the image. As the human face is a complex multidimensional visual representation, it is extremely challenging to create a computational model for identifying it. The video captured by the camera will be translated into frames as part of the suggested process. We proposed an improved texture classification algorithm local binary pattern (LBP)with histograms of oriented gradient HOG descriptor to improve detection accuracy. When a face is found in a frame, it is preprocessed to remove redundant information and minimize noise. The real-time processed image is compared to the trained images that have previously been saved in the database. The technology will send an automatic email notice to the police officials if the surveillance camera detects a criminal.