

ABSTRACT

Emotion Recognition is based on emotion recognition of human facial expressions. To recognize human emotions, conducted prior to the introduction of human facial expressions. Basically this method to detect changes in the pattern of the shape of the face, both the shape of the eyebrows, eyes, nose or mouth. Any change of the parts of the face shapes describes how a person's emotional state at the time. In the real life to recognize human facial expressions is a very easy thing, but to be applied into a system / application, this need through many processes. At this time to get to know someone on a medium face either the video / image is already highly developed, but only to the extent face recognition, it was not until the introduction of the emotion. Therefore it needs to be highly developed in order to create a natural communication between humans and computers.

One method that can be developed to identify one's emotions is Local Constrained Model is the human face recognition method that produces a row of dots divider (feature point) on the face. CLM is divided into two processes, namely CLM Model Building and CLM Search. In both the process should be gradual. CLM Model Building consists of two parts, one part describes the variations of feature points (Shape Model), and others describe each piece of the image around the feature point that may seem (Patch Model). At CLM Search, models that have been built are used to perform a search on the face image. CLM implemented in javascript that generate output position coordinates of the model's face into the array. CLM face recognition method has been used since 2006 [1] and is a promising new method to perform face recognition in the form of a feature point.

CLM method here produces an accuracy of 64.4% in the facial emotion recognition where Shape Model applying 18 component PCA and Patch model using 11x11 size. The system has been tested on the data of 250 images and 60 videos.

keyword : emotion recognition, constrained local model, feature point