Abstract

The mission of automatically recognizing different facial expressions in human-computer environment is significant and challenging. This paper presents a method to identify the facial expressions by processing images taken from Facial Expression Database. The approach for emotion recognition is based on the texture features extracted from the gray-level co-occurrence matrix (GLCM). The results show that the features are highly efficient to discriminate the expressions and require less computation time. The extracted GLCM features are trained with Support Vector Machine using different kernels to recognize the basic emotions Happy, Disgust, Surprise and Neutral.

References

Texture based Emotion Recognition from Facial Expressions using Support Vector Machine

605-614.

- http://chenlab.ece.cornell.edu/projects/FaceAuthentication

**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Gray Level Co-Occurrence Matrix (GLCM)  
Texture Feature  
Support Vector Machine