Automated Facial Expression System using PCA Algorithm

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Abstract

Facial expressions are important aspect of human communication. Human beings can identify facial expressions without any difficulty but this job is very difficult for computers to do. The purpose of this research paper is to develop such system which can identify the facial expressions of human beings in real time with minimum error. For the FER (i.e. Facial Expression Recognition), three steps are used; face detection, facial feature extraction and finally classification of expression. Technique used for facial feature extraction is Principal Component Analysis (PCA).

References

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Expression Recognition page 1.


Department of Statistics, University of Ghana

Index Terms

Computer Science Image Processing

Keywords

Facial expression recognition; PCA (Principal Component Analysis); Japanese Female Facial Expression (JAFFE) database