Abstract

The objective of this paper is to apply Support Vector Machine to the problem of classifying emotion on images of human faces. This well defined problem is complicated by the natural variation in people’s faces, requiring the classification algorithm to distinguish the small number of relevant features from the large pool of input features. Three different kernels i.e., linear kernel, polynomial kernel and RBF kernel are used to recognise eight facial expressions, anger, contempt, disgust, fear, happiness, neutral, sadness and surprise of human beings in still images. Accuracy of the three kernels is compared to judge the best kernel for facial expression recognition.

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Index Terms

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Keywords

Facial Expression, Support Vector Machine, Emotion Detection