Abstract

Facial expressions are one of the most important behavioral measures for emotion recognition. Expressions can tell a lot about the person, his behavior, what he is thinking and this data is vital in making various predictions which can have a variety of applications. In this paper we have implemented and compared three types of facial expression recognition and classification techniques. The first one is a state-of-the-art convolutional neural network, the second one is a transfer learning approach using the InceptionV3 model and in the last one, we have extracted the 68 facial points which have been identified as important for recognizing the expression of a person and passed it to a deep neural network. All these techniques have given accuracies over 90%, so comes the need to compare them in detail and determine which one of them would give results more accurately and efficiently.

References

action unit and emotion-specified expression." Computer Vision and Pattern Recognition Workshops (CVPRW), 2010.


Index Terms
Keywords

Facial Expression Recognition, CNN, Transfer learning, Haar Cascades