Abstract

Human emotion modelling could prove to be an important area of application for the purpose of increasing interaction between human and the computer. For modelling emotion, we have used corners as facial feature present in the image. A corner is a very important feature of an image. It represents intersection of two curves/edges, it also represents a significant change in the colour intensities in the image nearby the point itself. Extraction of corners in the image may prove to be very useful in certain areas of image processing. In this paper, various corner detection algorithms like SUSAN, Harris, Moravec and FAST corner detector algorithms are empirically evaluated with our proposed brute force approach. The comparison is based on
how much time does the algorithm takes to detect the corners on the facial features of frontal human face. Furthermore, the algorithm that was found to be performing better was used in the face modelling application.

References

Evaluation of Corner Detection Algorithms for Human Emotion Modeling

- http://en.wikipedia.org/wiki/B%C3%A9zier_curve
- http://en.wikipedia.org/wiki/YCbCr

Index Terms

Computer Science Algorithm

Keywords

Corner Detection Susan Harris Moravec Fast Brute Force Bezier Curve Face Modelling.