Abstract

The two most popular statistical methods used to measure the textural information of images are the Grey Level Co-occurrence Matrix (GLCM) and Texture Units (TU) approaches. The novelty of the present paper is, it combines TU and GLCM features by deriving a new model called "Pattern based Second order Compressed Binary (PSCB) image" to classify human age into four groups. The proposed PSCB model reduces the given 5 x 5 grey level image into a 2 x 2 binary image, while preserving the significant features of the texture. The proposed method intelligently compressed a 5x5 window into a 2x2 window and derived TU on them. Thus the derived TU also represents a TU of a 5x5 window. The TU of the proposed PSCB model ranges from 0 to 15, thus it overcomes the previous disadvantages in evaluating TU's.

References

- Lin-Lin Shen, Zhen Ji, "Modeling Geometric Features for Face Based Age
Pattern based Dimensionality Reduction Model for Age Classification


- M. A. Taister, S. D. Holliday, and H. I. M. Borrman. Comments on facial aging in law

Index Terms

Computer Science
Image Processing
Keywords
GLCM features; Texture Unit; Pattern; compressed model;