Abstract

An explorative work on texture feature extraction through oblong aperture for the non random type of texture images is presented in this paper. These features are further useful for segmenting the texture regions using the level set framework. The statistical moment descriptors are obtained within a small aperture and are embedded into a level set framework for segmentation. The shape of the aperture normally would be square and size selection done optimally. The square shaped aperture sometimes does not yield good feature descriptors particularly when the textured regions are highly structured. The proposed oblong aperture provides an appreciable change in extracted features particularly for structured images in contrast to the square shaped aperture.

References

Texture Feature Extraction through Oblong Aperture and Segmentation using Level Sets

- GUI-SONG XIA ET AL. : Texture Segmentation by Grouping Ellipse Ensembles via Active Contours, British Machine Vision Conference (BMVC) 2011
- T. F. Chan, L. A. Vese, Active contours without edges, IEEE trans. on image processing, 10, 2001, 266-276

Index Terms

Computer Science
Pattern Recognition

Keywords

Textures Moments Level sets oblong aperture