Abstract

This paper addresses an order-independent parallel thinning algorithm. This algorithm is a two-pass, iterative and parallel processing. In pass-1 the entire image is thinned uniformly to two-pixel thick. In pass-2 the two-pixel thick image is further thinned to one pixel thick image without leaving any two pixels in the resultant image. The thinning process is based on weight-values. The weight-value of a non-zero pixel is evaluated by analyzing neighboring pixels. The experimental results of the proposed algorithm are shown to be computationally more efficient in terms of thinning and preserving the connectivity.

References

- [Ahmad and Ward, 2002], A Rotation Invariant Rule-Based Thinning Algorithm for
An Improved order independent parallel thinning algorithm for Image thinning


Index Terms

Computer Science Pattern Recognition

Keywords
Parallel Order Independent Weight-values Thinning Efficient