Abstract

Skeletonization is a crucial step in many digital image processing applications like medical imaging, pattern recognition, fingerprint classification etc. The skeleton expresses the structural connectivities of the main component of an object and is one pixel in width. Present paper covers the aspects of pixel deletion criteria in the skeletonization algorithms needed to preserve the connectivity, topology, sensitivity of the binary images. Performance of different skeletonization algorithms can be measured in terms of different parameters such as thinning rate, number of connected components, execution time etc. Present paper focuses on thinning rate, number of connected components, execution time on Zhang and Suen algorithm and Guo and Hall algorithm.

References

Performance Comparison of ZS and GH Skeletonization Algorithms


Index Terms
Computer Science
Algorithms
Keywords
Skeletonization, Optical character Recognition, ZS, GH, ZSM