Abstract

Parallel algorithms for solving any image processing task is a highly demanded approach in the modern world. Cellular Automata (CA) are the most common and simple models of parallel computation. So, CA has been successfully used in the domain of image processing for the last couple of years. This paper provides a survey of available literatures of some methodologies employed by different researchers to utilize the cellular automata for solving some important problems of image processing. The survey includes some important image processing tasks
such as rotation, zooming, translation, segmentation, edge detection, compression and noise reduction of images. Finally, the experimental results of some methodologies are presented.

References

A Survey on Two Dimensional Cellular Automata and Its Application in Image Processing


Index Terms
Computer Science
Image Processing

Keywords
Cellular Automata  Linear Rule  Edge Detection  Noise Reduction  Zooming  Rotation
Translation