Abstract

In this paper, we are going to implement parallel Floyd Steinberg Dithering algorithm for multi core architecture. The algorithm is based on error dispersion. This algorithm is commonly used by image manipulation software, for example when an image is converted into GIF format. This technique generates the best results of any classical method, but it is the slowest because of its sequential computation. This paper brings out FSD algorithm for distributed (multi core) architecture. PFSD (parallel Floyd Steinberg Dithering) algorithm based on master slave architecture. Master collects data information and distributes data to multiple sections whereas slave works on sections which are monitored by master. The proposed algorithm can be extended to different data intensive and complex computing applications for multi core architecture. We expect this research will be very helpful in the field of mobile communication devices as multi core architecture has been introduced in mobile communication devices.
- OpenMP ARB, "OpenMP APP', www.openmp.org
- Xiaolin Wu in Digital halftoning by iterative isotropic error feedback The Visual Computer Volume 11, Number 2 (1994), 69-81, DOI: 10. 1007/BF01889977

Index Terms

Computer Science

Keywords
Floyd Steinberg Dithering (fsd)  Pfsd  Hpc  Multi Core Architecture  Bluetooth  Error Diffusion

Image Halftoning Technique