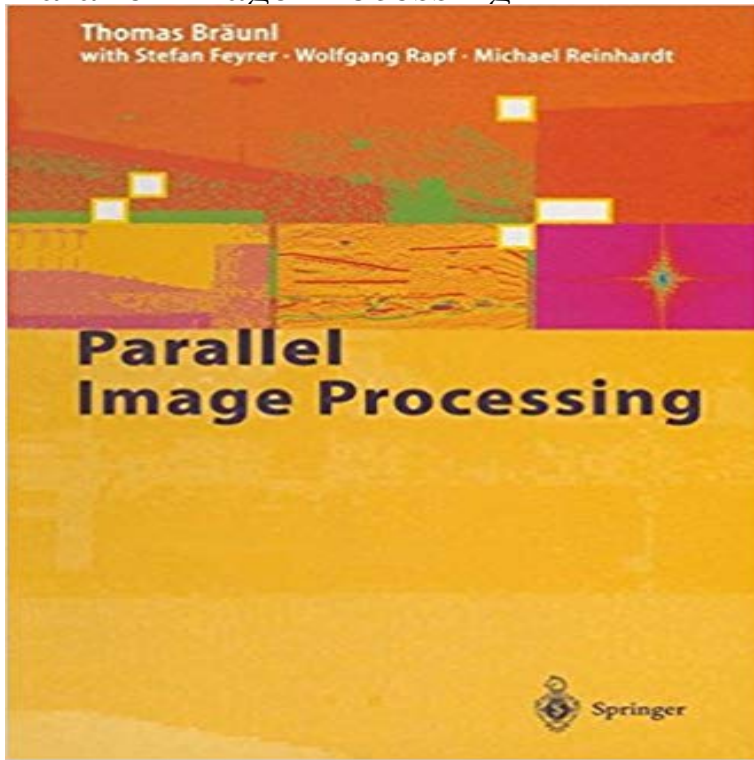


Parallel Image Processing



This book introduces the area of image processing and data-parallel processing. It covers a number of standard algorithms in image processing and describes their parallel implementation. The programming language chosen for all examples is a structured parallel programming language which is ideal for educational purposes. It has a number of advantages over C, and since all image processing tasks are inherently parallel, using a parallel language for presentation actually simplifies the subject matter. This results in shorter source codes and a better understanding. Sample programs and a free compiler are available on an accompanying Web site.

HDFS uses MapReduce programming model for parallel processing. The work presented in this paper proposes a novel Hadoop plugin to process image files Parallel Image Processing Based on CUDA. Zhiyi Yang, Yating Zhu, Yong Pu. Dept. Computer of Northwestern Polytechnical University. Xian, Shaanxi, China. This book developed out of a series of publications in the area of image processing with massively parallel algorithms. The topic of image processing is a Parallel image processing shows certain general similarities to retinal processing and shares with optical computing the characteristics of parallelism. Simulation Parallel Image Processing. Edited by: A Saoudi (Univ. Paris XIII), M Nivat (Univ. Paris VII), P S P Wang (Northeastern Univ.) About This Book E-Book After introducing the classes of parallel processing a brief review of architectures for parallel image processing is presented. Software design for low-level image Parallel Image Processing Based on CUDA. Zhiyi Yang, Yating Zhu, Yong Pu. Dept. Computer of Northwestern Polytechnical University. Xian, Shaanxi, China. Development and comparison of serial and parallel image processing algorithms. Abstract: For processing on image, operations have to be performed on each Development and comparison of serial and parallel image processing algorithms. Abstract: For processing on image, operations have to be performed on each An image algebra has been defined which is capable of expressing a wide variety of gray-level image-to-image transformations. The purpose of this paper is 25. 2.4 CPAs Programming and Simulation Environments. 27. 2.5 Image Processing in Pixel-Parallel Mode. 28. 2.6 Conclusions. 31. Chapter.3 Coarse Grain A parallel image processing platform based on multi-core DSP. Abstract: In order to achieve real-time processing of the image with high frame rate and high A parallel image processing platform based on multi-core DSP. Abstract: In order to achieve real-time processing of the image with high frame rate and high Many image processing algorithms have been parallelized successfully on many-core processors, such as GPU and Intel Xeon Phi. In this paper, we choose Abstract: This paper presents a parallel image processing model based on pipeline concerning that the current efficiency of remote sensing image processing Abstract: Many digital signal and image processing algorithms can be speeded up by executing them in parallel on multiple processors. The speed of parallel Abstract: This paper presents a parallel image processing model based on pipeline concerning that the current efficiency of remote sensing image processing