

Scalability evaluation of matlab routines for parallel image processing environment

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Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20496914&lokasi=lokal>

Abstrak

ABSTRAK

Image edge detection plays a crucial role in image analysis and computer vision, it is defined as the process of finding the boundaries between objects within the considered image. The recognized edges may further be used in object recognition or image matching. In this paper a Canny image edge detector is used which gives acceptable results that can be utilized in many disciplines, but this technique is time consuming especially when a big collection of images is analyzed. For that reason, to enhance the performance of the algorithms, a parallel platform allowing speeding up the computation is used. The scalability of a multicore supercomputer node, which is exploited to run the same routines for a collection of color images from 2100 to 42000 images is investigated.