Detecting the Edge of Multiple Images in Parallel

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Abstract : Edge is variation of brightness in an image. Edge detection is useful in many application areas such as finding forests, rivers from a satellite image, detecting broken bone in a medical image etc. The paper discusses about finding edge of multiple aerial images in parallel .The proposed work tested on 38 images 37 colored and one monochrome image. The time taken to process N images in parallel is equivalent to time taken to process 1 image in sequential. The proposed method achieves pixel level parallelism as well as image level parallelism.

Keywords : edge detection, multicore, gpu, opencl, mpi
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