

sci.image.processing: Re: OpenGL and high-performance image processing.

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"CHK" <b@b.biz> wrote in message news:<nzRpc.1620\$J5.139404@news20.bellglobal.com>...

- > *I was told that the latest version of OpenGL contains certain image processing extensions.*
- > *Did anyone here have any experience with this technology? What's your opinion about usefulness of the OpenGL extensions as a way write high-speed image processing applications?*
- >
- > *I thought it may be viable to use GPU instead of CPU, because GPU can deliver truly amazing speed for vector data processing.*
- > *But there is an obstacle: cost of data transfer to video memory and back. I don't need to display the images, just to utilize GPU power to do some image processing/analysis tasks.*
- >
- > *Which video cards support this functionality (in hardware)?*
- >
- >
- > *Thanks.*
- > *CHK*

Since I didn't see it mentioned yet in the thread... Some of the newer cards have something called "fragment programs". Basically, you can write fairly general software which is evaluated on the GPU and determines the properties of each pixel.

Someone's written a discrete wavelet transform, for example:

<http://www.cse.cuhk.edu.hk/~ttwong/software/dwtgpu/dwtgpu.html#video>

I haven't done any work with fragment programs myself, but it seems like they might do a lot of what you're looking for.

Michael