

Title	グラフィックスハードウェアを活用した画像処理手法の開発支援システムの提案
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The proposal of the development support system of the image-processing technique which utilized graphics hardware

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The development support system of the technique using graphics hardware of image processing is proposed. As for the present graphics hardware, the function is strengthened for improvement in the speed of the rendering of real time 3D computer graphics. The directivity of the functional enhancement is going to programmable for realizing processing data in parallel at high speed and flexible shading.

Such a new type of graphics hardware is called GPU (Graphics Processing Unit), and research of the algorithm for real time 3D computer graphics is shifted from the thing of a CPU base to execution by graphics hardware. In this paper, the system which supports the development for newly including high-speed image processing in application based on such GPU is proposed. In this system, processes an image-processing algorithm in code of GPU programming, and also an image-processing algorithm is made into what can be built in a visual environment.

While being able to process image processing at high speed by making it process by GPU, I think that the formation of algorithm parts and procedure in visual environment will be useful for improvement in efficiency.