Abstract

Green computing is the process of reducing the power consumed by a computer and thereby reducing carbon emissions. The total power consumed by the computer excluding the monitor at its fully computative load is equal to the sum of the power consumed by the GPU in its idle state and the CPU at its full state. In our paper we have tried using the high processing speed of the GPU's to do the computational intensive parts while the sequential parts like storing data is made by the CPU. The GPU has 30-50 times more processing speed than the CPU. The GPU therefore does the 100% of the CPU work in its idle state. Hence the power consumed by the GPU will be low. Also when the GPU is doing all the work the CPU will remain at a load less than its idle load. Hence the power consumed will be equal to the power consumed by the CPU at a load less than its idle load plus the power consumed by a GPU.

References

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Index Terms

Computer Science

Keywords

Green Computing  Cpu  Gpu  Power