



The School of Technology

BSc (Hons) Computing Software Development (Batch 001 – October 2018)

Experimenting with CUDA

6CS005

Assignment

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A dataset that is over 100 GB in size is going to have a lot of data points within a million or even a billion ballpark spectrum. It doesn't matter how easily the CPU has many loop points, it just doesn't have ample cores to do effective parallel processing. If your CPU has 20 cores (which is a fairly costly CPU), only 20 data points can be processed at a time!

CPUs will be faster when clock speed is more essential — or you just don't have a GPU install. If the procedure you want to execute is GPU applied, then a Cpu is much more efficient if the operation will benefit from parallel processing.

As we all know, bitcoin mining uses GPU instead of CPU. Bitcoin mining requires a hash function to be named, millions of times, repeatedly. Ideally, a multi-core computer can parallel process these and complete the mining process more quickly. Compared to a CPU, GPU now has millions of cores. Hence the compute-intensive hash problem is the perfect solution. Because they are more powerful than their immediate counterparts, graphics processing units (GPU) have been used in the mining process for years.