

RUNNING APPLICATION USING NEURAL NETWORK ON CPU-GPU SYSTEM

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ABSTRACT

Scheduling decisions to assign some applications to CPU and others to GPU, at local PC location is very crucial for optimum utilization of devices such as CPU and GPU, if they are available in a PC or Laptop. If we allow the operating system to make global scheduling decisions and assign some applications to a slower device, we may both increase overall system throughput +t and decrease individual application runtimes. We shall use an application developed using Neural Network, to be executed on a system having CPU and GPU. This is implemented in Cuda-C language. It shows the performance improvement drastically, when major portion of application is run on GPU and few steps are executed on CPU. Cuda C has the functions to handle it. It is an extension of C – Language.

KEYWORDS: Scheduling Decisions, Historical Data, Artificial Neural Network, Weighted Averages, Cuda– C Language, Cudamalloc and Cudamemcpy