Optimization Method to Reduce Matrices Multiplications in the Context of CUDA

Abstract

Parallel programming is an effective way to increase the speed of processing applications. It is carried out simultaneously by multiple processors rather than by a single processor. We compare the number of necessary calculations for multiplying the chain matrix in normal mode with the parallel mode. Since we used the famous parallel language named CUDA in our program, we will first present a brief description of the language and secondly, we explain essential mathematical notions and compare the performance of both programs.

References


**Index Terms**

Computer Science  Parallel Computing

**Keywords**

CUDA, GPU, Parallel programming