A Comparative Study on the Implementation of Matrix Addition in Sequential and Parallel Computing Paradigms

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Abstract

Operations on matrices are very basic and common in many fields of computer science and information technology, like Image Processing, Graph Algorithms, etc. This paper presents a comparative analysis of the implementation of additions of two matrices with large dimensions both in sequential and parallel computing paradigms. It provides a case study on the implementation of addition of two matrices with large dimensions in C language, Java Language and CUDA C Language implementations.

References

Index Terms

Computer Science

Software Engineering

Keywords

C Implementation, CUDA C Implementation, GPGPU Computing, Java Implementation, Matrix Addition, Parallel Implementation, Sequential Implementation.