

EE699 Assignment 2: Kentucky's Line Extrusion Orderer

Implementor's Notes

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ABSTRACT

This assignment want you to use OpenMP to parallelize the genetic algorithm to speed it up.

1 GENERAL APPROACH

This assignment required to implement a parallel computing to make sure that the program can run parallel to speed up. But you also need to make sure that there has no two processors working on the same memory at the same time.

I build my algorithm by rewrite the while loop to a for loop, for the for loop, it's will be easy to use "pragma parallel for" to make sure it will run in parallel. I also use "pragma omp critical" to make sure that when other processor trying to modify a memory, other processor will not use the value in that memory.

2 ISSUE

I feel that I still not understand the OpenMP very well, I'm not sure did I implement it right, although it can speed the program from 0.12s to 0.04s. I use "printf" and "omp_get_thread_num()" make sure that every process do part of the algorithm. But I don't know how to make sure the result was right. In other words, I'm not sure did I lock the memory in a right way.