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COSC-320

Progress Report

For this project, I have chosen to design and implement an algorithm that incorporates parallel computing into its structure to increase the speed at which the algorithm runs. So far I have mostly been researching the parallelism as there are a lot of aspects involved in such a large and complex topic. I have read the entire article that was provided as well as some additional research to help give me a deeper understanding of parallel computing. Something I found peculiar when reading about parallel computing was that in certain cases parallelizing an algorithm can actually slow down an algorithm due to various types of overhead such as the actual division of the problem into smaller tasks or overloading memory transfer. Furthermore, I made a few partial implementations of serial algorithms to see which would interest me the most in parallelizing and I have decided to try and make a parallel algorithm for matrix multiplication. This algorithm is embarrassingly parallel as all of the steps required in matrix multiplication are independent from others and no calculations need information from earlier results. In the next few weeks I want to finish my implementation and then move on to working on the presentation for November 20th.