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CS4370

Parallel Programming Many-Core GPUs

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Tiled Matrix Multiplication

My tiled matrix multiplication program has all required functionality, but does not have the optional functionality of timing the memory transfer of the tiles. It lets you select matrix size, tile size, and then prints the matrices, and checks if the CPU and the GPU got the same results. For the 8x8 matrix, CPU was .005ms, GPU was .04ms, for the 128x128 matrix CPU was 7.5ms and GPU was .1ms, for the 1024x1024 matrix, CPU was 6 seconds, GPU was 13ms, and for the 4096 the CPU was 1.18 x 10^6 ms, and the GPU was 600ms.





