

### Assignment #3: Parallelizing Matrix Multiplication using CUDA C

Create two cuda programs that calculates the  $M \times N$  matrix multiplication one is the basic matrix multiplication and the other using tiling.

Submit a short report the contains the following information:

1. How did you parallelize the computation? This should be explained using figures and pseudo code.
2. A link to the code (Github link)
3. The performance that includes speedup factor, efficiency, and scalability.
4. Comparison of the two implementations.
5. Discuss your results and draw some conclusions in one or two paragraphs.

Optional: implement the basic and tiled matrix multiplication using OpenACC, The openACC part is not graded, but it is a good exercise, and will help you increase your understanding.

This assignment is not a group assignment.