## CSC 4760/5760, Fall 2015

## **Programming Assignment 6**

Assign date: November 23, 2015, Due: December 4, 2015

For this assignment you need to write a GPU (CUDA) version of Matrix multiplication code that you have developed as Program 2. Run your code (both OpenMP (or Pthread) version and CUDA version for problem sizes 5000, 10000, 20000, 40000 (As big as you can) on HPC cluster. Measure the execution time of your openMP(or Pthread) code for 1 and maximum no of threads (16) on one node, and for the GPU version. For OpenMP(or Pthread) version you can use results from your previous runs (prog 2 or prog 3). Compute speed up and efficiency for both code Write a report presenting (provide table and graph) and explaining your (provide graph) results.

## **Submission:**

Submit a copy of your code, a readme file (how to compile and run your code), and the report on ilearn. Also submit a hardcopy of your report.