

Introduction to CUDA Parallel Programming Homework Assignment 1
Due 2020/03/17

1. Use /home/cuda_lecture/vecAdd_1GPU/vecAdd.cu as a template to write your own CPU+GPU code for the matrix addition with 2D grid and 2D blocks. Setting the input NxN matrices (where N=6400) with entries of random numbers between 0 and 1, determine the optimal block size by running your code for the following block sizes: (4,4); (8,8); (10,10); (16,16); (20,20); (32,32).

Your homework report should include your source codes, results, and discussions. The discussion file should be prepared with a typesetting system, e.g., LaTeX, Word, etc., and it is converted to a PDF file. All files should be zipped into one gzipped tar file, with a file name containing your student number and the problem set number (e.g., r05202043_ps1.tar.gz).

Please send your homework from your NTU email account to twchiu@phys.ntu.edu.tw before 24:00 of the due date.