

COSC 480 – Miniproject #1

1.) To start, you'll be coding a simple constant multiplier. For this, you should create a CUDA parallel method that will multiply a large integer array by a constant. In your main you should get the size of the array from the user, randomly generate the integer array, and then get a constant to multiply each element of the array by from the user. Then, run the method.

As a note – you probably want to mod the integers that you get out of the random number generator in C by some small-ish integer (say 100000).

While we won't be timing your code explicitly, I will be looking for efficient solutions that utilize as much of the CUDA cores as you need. I will be running your code on the g2.2xlarge cluster we have been using in class.

2.) Submit your sufficiently commented source file via Blackboard by 11:59pm on 10/9. This project may be worked on in pairs. If you choose to work in a pair, you must include that information as part of your comment block at the start of your source.