



**SWE 594 Multicore Programming,
Software Engineering, Department of
Computer Engineering
Boğaziçi University**

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Report on Project – 2

Assignment

For this project, we were to implement an Thrust program that found prime numbers in an interval defined by input value M . We were specifically supplied with an algorithm to use: each number is to be compared against prime numbers found so far, until square root of the number is passed.

Problems Confronted

The biggest problem that we confronted is that we could not achieve our program to run on AWS GPU servers. Because we already had an account from AWS but it was a basic-plan account. Therefore, it was not allowed us to launch one more server on AWS. We had also launched a free-tier server from AMI (Amazon Machine Image) provided by Can Özturan, but free-tier version of that AMI did not have a GPU supported on the virtual server whereas it had CUDA and Thrust installed on it. We also created an other account by providing different credentials on AWS, but it did not work neither. That's why, we are sharing our results without running the program on a GPU. Unfortunately, you are going to find only the durations of searching for the prime numbers on host in the file `"results.csv"`.

Inputs and Outputs

The program accepts an integer as a max number to be searched and generates a single line of result which shows the durations of running on host and device. It accepts 5 different inputs from `"100000"` to `"50000000"`. It creates a file named `"results.csv"` into the same folder that it is running.

Results

We do not measure and compare the results between the execution duration of host and device.