HW6

CUDA optimization report:

Basically, I use shared memory instead of global memory. Because shared memory has better bandwidth than global memory. Thus, we simply need to copy the input vector in global memory into shared memory. So I rewrote the kernel function.

After using shared memory, the program got speedup.

The output of original one:



And after optimization:



The speedup = 1.32748

And the output image:

