

Report 5 - Gaussian Blur from CUDA

Le Nhu Chu Hiep

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1 Implementation

- Build new kernel function to perform convolution with blur kernel
- Reuse host logic of labwork 4 to run new kernel

2 Result

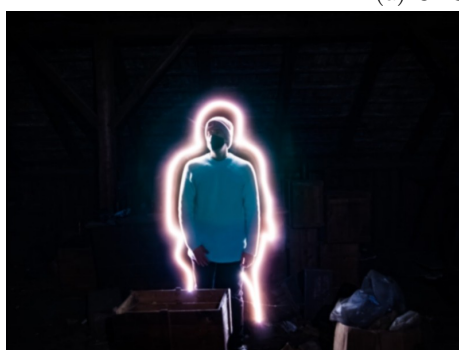
2.1 Text Result

```
USTH ICT Master 2018, Advanced Programming for HPC.  
Warming up...  
Starting labwork 5  
labwork 5 CPU ellapsed 71.9ms  
Block Size: 1024, Grid Size: 1900  
labwork 5 GPU no shared mem ellapsed 16.2ms  
Block Size: 1024, Grid Size: 1900  
labwork 5 GPU shared mem ellapsed 17.0ms  
labwork 5 ellapsed 17.0ms
```

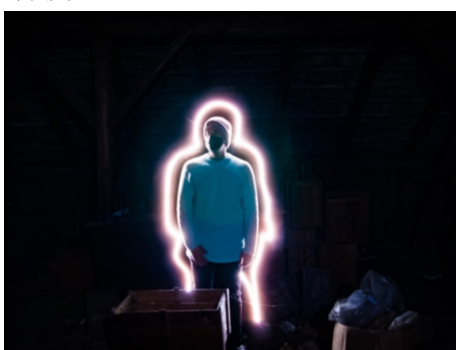
2.2 Image Result



(a) CPU Version



(b) GPU Without Share Mem Version



(c) GPU With Share Mem Version

Figure 1: Result Images