# 实验3报告

https://github.com/2horse9sun/coursework/blob/main/Al-System/Labs/BasicLabs/Lab3/lab3-report.md

(图片存储在github仓库中,若因网络原因无法显示,请查看pdf文件)

### 1. 实验环境

### 1.1 硬件环境

CPU(vCPU数目): Intel® Core™ i7-9750H CPU @ 2.60GHz × 12

GPU(型号,数目): GeForce RTX 2080 with Max-Q Design/PCIe/SSE2 × 1

#### 1.2 软件环境

OS版本: Ubuntu 18.04.5 LTS

深度学习框架, python包名称及版本: Pytorch 1.5, Tensorflow 1.15.0

CUDA版本: 11.0

## 2. 实验结果

### 2.1 CPU only

354 040 77 474
154.949ms 77.474ms 2
154.939ms 77.470ms 2
154.932ms 77.466ms 2
154.802ms 77.401ms 2
7.789ms 1.947ms 4
272.434us 272.434us 1
151.305us 75.652us 2
99.670us 99.670us 1
75.904us 25.301us 3
65.629us 32.815us 2

#### 2.2 With CUDA

Name	Self CPU total %	Self CPU total	CPU total %	CPU total	CPU time avg	Number of Calls
conv2d	0.00%	4.672us	98.78%	153.609ms	76.804ms	2
convolution	0.00%	4.406us	98.77%	153.604ms	76.802ms	2
convolution	0.03%	50.824us	98.77%	153.600ms	76.800ms	2
udnn convolution	98.68%	153.458ms	98.68%	153.458ms	76.729ms	2
oin memory	0.71%	1.097ms	0.75%	1.160ms	289.989us	4
addmm	0.17%	269.622us	0.17%	269.622us	269.622us	1
feature dropout	0.01%	21.381us	0.10%	149.861us	74.930us	2
nyLinearFunction	0.08%	121.019us	0.08%	121.019us	121.019us	1
relu	0.04%	69.529us	0.04%	69.529us	23.176us	3
add	0.04%	58.838us	0.04%	58.838us	29.419us	2
Self CPU time total: 155.513						