

# note of experiment in week4

zxp

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## **1 environment**

cpu: Intel(R) Xeon(R) Gold 6330 CPU @ 2.00GHz (56 cores were applied)

gpu: rtx3090(a piece was applied)

System: CentOS7

Compiler: 9.5

## **2 code**

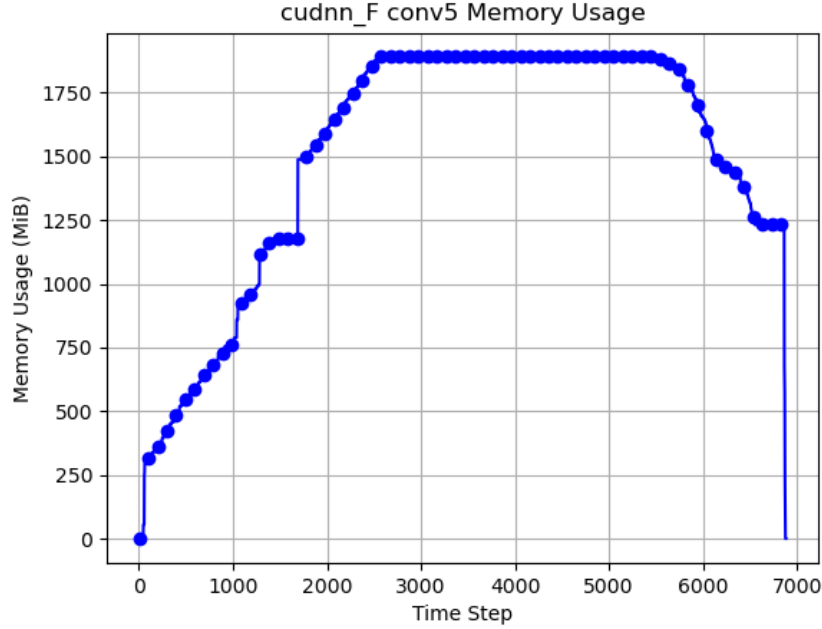


Figure 1: memory

### 3 Experiment

This week I continue to test the memory usage of the seven cudnn algorithms (using cudnn in libtorch), batch is set to 128, 256, and 512, and the code is changed to initialize and move memory from CPU to GPU only once, and the results are shown in the attached excel.

The following figure is to measure the memory transformation trend of one layer (conv5) of an algorithm (FTT in cudnn).

#### 3.1 Analysis

We need Data of im2win and cublas.