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ECE 408/CS483 Milestone 1 Report

1. Show output of rai running Mini-DNN on the CPU (CPU convolution implemented) for batch size of 1k images. This can either be a screen capture or a text copy of the running output. Please do not show the build output. (The running output should be everything including and after the line "*Loading fashion-mnist data...Done*").

```
Test batch size: 1000
Loading fashion-mnist data...Done
Loading model...Done
Conv-CPU==
Op Time: 8608.12 ms
Conv-CPU==
Op Time: 25755.5 ms

Test Accuracy: 0.886

real    1m24.142s
user    1m23.997s
sys      0m0.144s
* The build folder has been uploaded to http://s3.amazonaws.com/files.rai-project.com/userdata/build-6168b2435876a2028efbbd13.tar.gz. The data will be present for only a short duration of time.
```

<http://s3.amazonaws.com/files.rai-project.com/userdata/build-6168b2435876a2028efbbd13.tar.gz>

2. List Op Times (CPU convolution implemented), whole program execution time, and accuracy for batch size of 1k images.

Batch Size	Op Time 1	Op Time 2	Total Execution Time	Accuracy
1000	8608.12 ms	25755.5 ms	1m24.142s	0.886

3. Show percentage of total execution time of your program spent in your forward pass function with 'gprof'. This can either be a screen capture or a text copy of gprof output. You should only include the line that includes your CPU forward pass function '*conv_forward_cpu*', so please do not give more than this line.

```
andy@GANYMEDE:/mnt/c/users/andy/downloads/build$ gprof -Q m1 gmon.out | head -n 10
Flat profile:

Each sample counts as 0.01 seconds.
 %   cumulative   self           self      total
time  seconds    seconds   calls   s/call   s/call   name
84.55      34.36      34.36         2    17.18    17.18 conv_forward_cpu(float*, flo
at const*, float const*, int, int, int, int, int, int)
```

[84.55%](#)