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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*").

```
[100%] Built target final
Running bash -c "time ./m1 1000"    \\ Output will appear after run is complete.
Test batch size: 1000
Loading fashion-mnist data...Done
Loading model...Done
Conv-CPU==
Op Time: 8292.99 ms
Conv-CPU==
Op Time: 23888.2 ms

Test Accuracy: 0.886


real    0m41.564s
user    0m41.440s
sys     0m0.124s
The build folder has been uploaded to http://s3.amazonaws.com/files.rai-project.com/
```

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	*8292.99 ms*	*23888.2 ms*	*41.565 s*	*86.6 %*

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.

```
  %   cumulative   self              self     total
 time   seconds   seconds    calls   s/call   s/call  name
 84.62     32.03    32.03        2    16.02    16.02  conv_forward_cpu(float*, float const*, float const*, int, int, int, int, int, int
```