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Section: <class section>

# 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").

```
Loading fashion-mnist data...Done
Loading model...Done
Conv-CPU==
Op Time: 8587.38 ms
Conv-CPU==
Op Time: 24752.3 ms

Test Accuracy: 0.886

real    1m22.858s
user    1m22.685s
sys     0m0.172s
* The build folder has been uploaded to h
http://s3.amazonaws.com/files.rai-project.
com/userdata/build-616c520ef5b8890a7b32bc
bb.tar.gz. The data will be present for o
nly a short duration of time.
```

<http://s3.amazonaws.com/files.rai-project.com/userdata/build-616c520ef5b8890a7b32bcbb.tar.gz>. The data will be present for only a short duration of time.

```
Loading model...Done
Conv-CPU==
Op Time: 8587.38 ms
Conv-CPU==
Op Time: 24752.3 ms
```

Test Accuracy: 0.886

```
real    1m22.858s
user    1m22.685s
sys     0m0.172s
```

\* The build folder has been uploaded to

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	8587.38 ms	24752.3 ms	1m22.858s	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.

<gprof output here>

```
84.35  33.42  33.42    2  16.71  16.71 conv_forward_cpu(float*, float const*, float const*,
int, int, int, int, int, int)
```