

ECE 4122 Final Project Report
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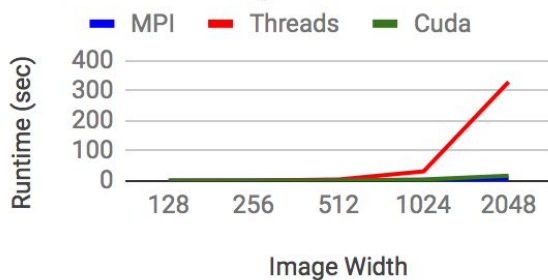
In order to run, you must load these modules: cmake/3.9.1, cuda, openmpi, gcc.

If you type “cmake ..” from a build folder in the top-level folder and then type “make,” it will create three folders (p31, p32, p33) which contain the executables. We used a top-level cmake list and then a cmake list for each of the subdirectories.

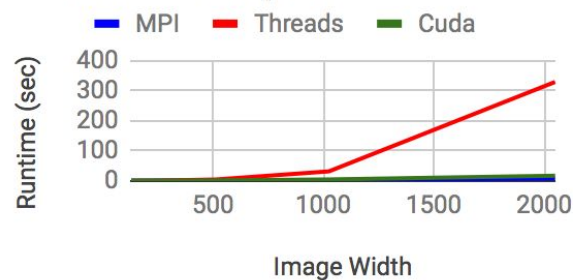
Algorithm Runtime Comparison:

	Algorithm Run Time (sec)		
Size	MPI	Threads	Cuda
128 x 128	0.378264	0.0928684	0.0239838
256 x 256	0.623279	0.580191	0.552684
512 x 512	0.824382	4.17516	1.16688
1024 x 1024	2.33089	31.2099	4.40396
2048 x 2048	7.52275	328.437	16.7336

Runtime Comparison



Runtime Comparison

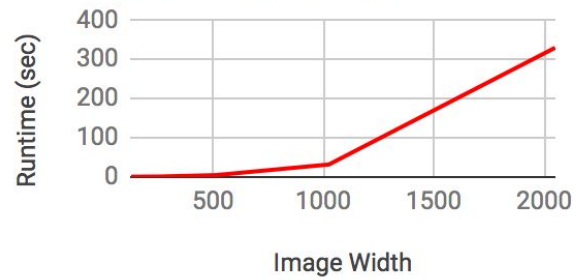


Individual Algorithm Runtimes:

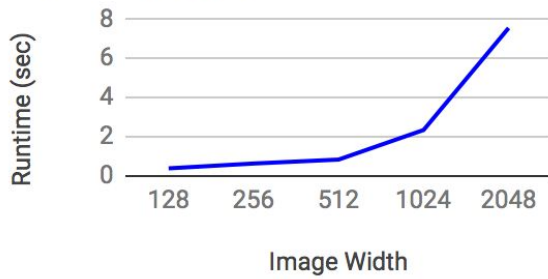
C++ Thread Runtimes



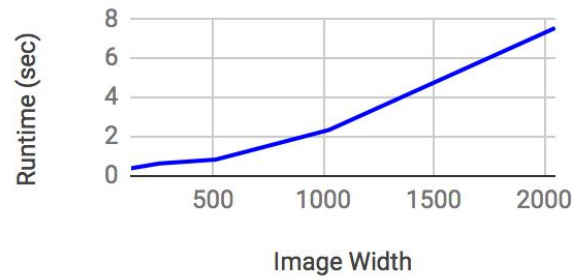
C++ Thread Runtimes



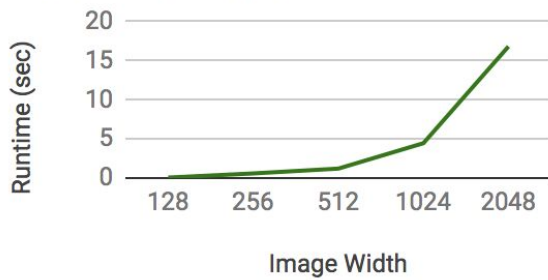
MPI Runtimes



MPI Runtimes



CUDA Runtimes



CUDA Runtimes

