

Averaging Image Project Report

1. Objective of the project:

The objective of this project is to produce a blurred version of an image using a gaussian blur. This is done with a kernel known as a gaussian filter. Gaussain_blur.cpp uses multiple threads to produce the image in parallel chunks.

2. Details about how you completed the project:

This project was completed downstairs on the RedHat Linux machines in DSL 152 using Geany as the IDE. I worked alone, and used this source for help on producing the kernel:

<https://www.geeksforgeeks.org/gaussian-filter-generation-c/>

3. Results:

Number of threads	Elapsed time (seconds)
1	0.0852255
2	0.0546767
3	0.0484158
4	0.0484158
5	0.038134
6	0.038134
7	0.0427671
8	0.0367609

Scalability Plot

