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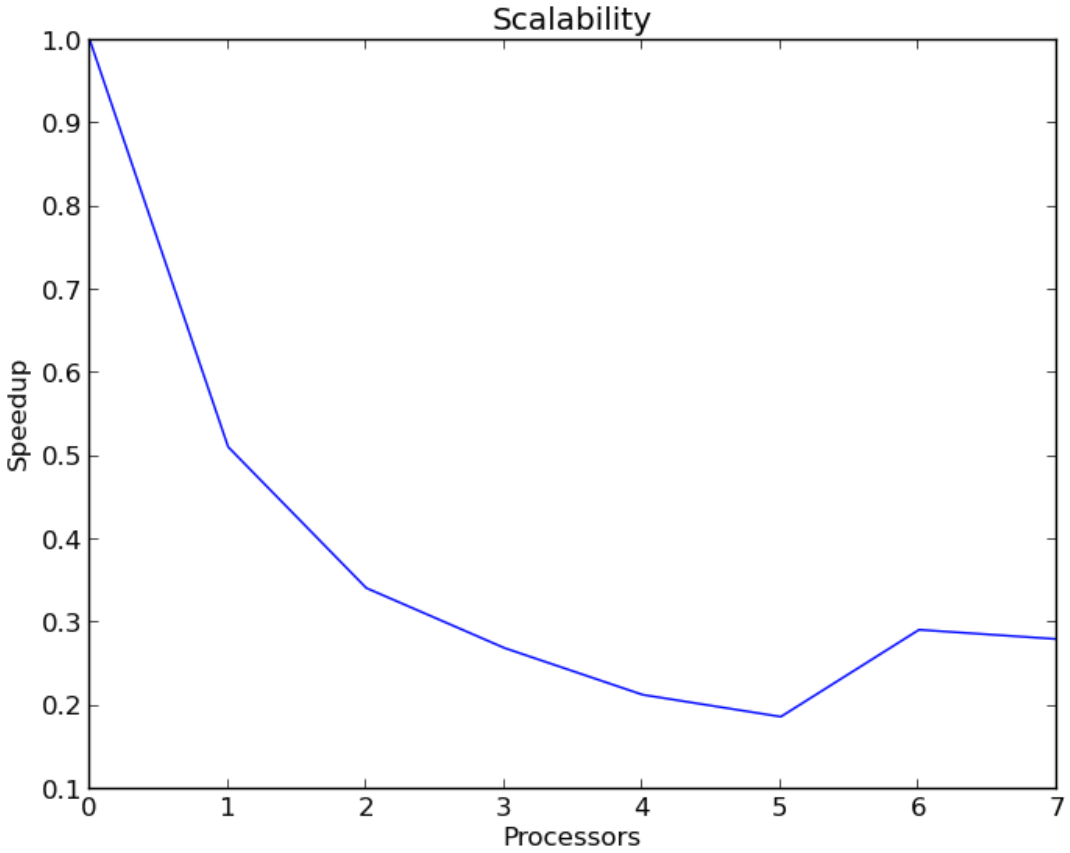
Image Segmentation using K-means and OpenMP

1. The objective of this project is to use the K-means algorithm to segment an image into different colors. This is done by initializing generators at random pixels of the image. Calculating the color distance between each generator and each pixel, grouping the pixels by the closest generator, changing the color of the generator to the average color of its group of pixels, and then iterating until we stop.
2. Here are my results

Number of threads	Execution Time
1	.984729
2	.503823
3	.336802
4	.265834
5	.210501
6	.184503
7	.287404
8	.276399

And my scalability plot is below!


Scalability
Speedup
Processors
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
1
2
3
4
5
6
7