Subject: Cool!

Posted by mirek on Tue, 09 Dec 2008 08:00:29 GMT

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http://rogeralsing.com/2008/12/07/genetic-programming-evolut ion-of-mona-lisa/

Subject: Re: Cool!

Posted by emr84 on Tue, 09 Dec 2008 15:31:38 GMT

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Very interesting!!

Subject: Re: Cool!

Posted by mirek on Tue, 09 Dec 2008 18:19:10 GMT

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Started me thinking about converting arbitrary image into highly compressed svg

The algorithm used is highly unoptimal, it is not even true genetic algorithm, but his idea of using alpha channel is brilliant!

Mirek

Subject: Re: Cool!

Posted by mdelfede on Tue, 09 Dec 2008 22:58:19 GMT

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Really cool stuff!

I wonder how long it takes to get the final picture....

Max

Subject: Re: Cool!

Posted by Mindtraveller on Fri, 12 Dec 2008 06:49:10 GMT

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luzr wrote on Tue, 09 December 2008 21:19Started me thinking about converting arbitrary image into highly compressed svg

The algorithm used is highly unoptimal, it is not even true genetic algorithm, but his idea of using alpha channel is brilliant!

Mirek

I think using optional vertex colors + alpha will add much flexibility while keeping archive data almost as short as original idea. Also this structure (polygons w/vertex colors) will be compatible with graphics accelerators` polygons so it will be possible to use GPU processing to quickly build resulting image.

Also I think this approach will be even more effective on real-world videos, where it is possible to 'morph' polygons through the frames.

Subject: Re: Cool!

Posted by mirek on Fri, 12 Dec 2008 08:53:38 GMT

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Mindtraveller wrote on Fri, 12 December 2008 01:49luzr wrote on Tue, 09 December 2008 21:19Started me thinking about converting arbitrary image into highly compressed svg

The algorithm used is highly unoptimal, it is not even true genetic algorithm, but his idea of using alpha channel is brilliant!

Mirek

I think using optional vertex colors + alpha will add much flexibility while keeping archive data almost as short as original idea. Also this structure (polygons w/vertex colors) will be compatible with graphics accelerators` polygons so it will be possible to use GPU processing to quickly build resulting image.

Also I think this approach will be even more effective on real-world videos, where it is possible to 'morph' polygons through the frames.

Yes, my thinking runs along similar lines

Also, introducing a little bit more rigid structure (e.g. use only triangles and only place new triangles by dividing existing ones to 4) could have interesting use in computer vision.

But then you should have to try a better algorithm...

One option is to start with reduced resolution, then increase resolution as approximation converges.

Mirek