

Re: interpolation for a color image?

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  - *Date:* Thu, 29 May 2008 09:42:01 -0700 (PDT)
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On May 29, 12:07 am, Martin Leese <[ple...@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:ple...@xxxxxxxxxxxxxxxxxxxxxxxx)> wrote:

Harris wrote:

Original image sample:

1 2  
3 4

Your 2-pass 1-D linear interpolation expands this box twice, once for X-direction and once for Y-direction. The new pixels at position (area) 4 are interpolated using 3 and 2 respectively, that is using distance 1. But the distance from 1, which should also be taken into account statistically, is at distance  $\sqrt{2}$ . Even if you are using weighting factors, you end up with something else (weighted average) other than true bilinear interpolation.

Sorry to interrupt, but bi-linear interpolation is separable. Always has been, always will be. If you still doubt this then ten minutes with pen and paper will convince you otherwise.

We now return you to your scheduled flame-fest.

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Regards,  
Martin Leese  
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Remember the saying, "All that is necessary for evil to succeed is that good men do nothing."? Replace "evil" with "stupidity". You are a good man. Thank you.

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