

Re: Is there any way to solve the aliasing of an image in the spatial domain

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Source: <http://sci.tech-archive.net/Archive/sci.image.processing/2006-02/msg00233.html>

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 - *Date:* 23 Feb 2006 15:25:36 -0800
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As you sub-sample the DFT spectrum envelope, you lose some fine details of it. When you translate the new spectrum back to the new image, this translates to aliasing effects similar to the ones that appear in mpeg and jpeg files with very low quality (high compression level).

In order to avoid aliasing, you either make sure your sub-sampling does not destroy the profile of the original spectrum (i.e. make sure you use enough samples, usually more than 1/4 of the original size), or decide to sub-sample the image itself and keep only the most significant features (i.e. cut the higher frequencies and keep all the lower ones that usually contain most of the image content).

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Harris

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