



# GIMP Plugin Registry

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## Wavelet sharpen

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The wavelet sharpen plugin enhances apparent sharpness of an image by increasing contrast in high frequency space. The amount of unsharpness of the original image can be taken into account by adjusting the sharpening radius. As an option you can choose to sharpen the luminance (YCbCr) channel of the image only.

### Features

- Graphical user interface
- Preview image
- Option to sharpen luminance channel only
- Selectable sharpen radius
- Lossless image conversions

### Description

The wavelet decomposition of an image results in multiple images with different frequency content. When amplifying the high frequency parts the recomposed image appears to be sharper than the original one. That way the frequency which should be amplified most can also be selected and a given unsharpness in the original image can be taken into account.

This GIMP plugin allows to perform this wavelet decomposition and allows the user to adjust the amount of sharpening and the radius of unsharpness in the original image. As an option you can sharpen the luminance channel of the YCbCr converted image only which reduces colour artifacts to appear (especially in noisy images). The sharpness of the colour contrast is not critical to the human eye.

### Example

This picture was taken with the Nikon D80 and the Nikkor AF 50mm 1:1.8 lens fully open. Because the image is slightly out of focus and due to the wide apperture and aliasing the image is not quite sharp.



## License

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