



by L. Davenport

Neat Image is a program that removes digital noise from photos but leaves the details untouched. Neat Image can make images look sharper without degradation of image quality (which is usually inevitable with noisy images). It works with photos from cameras, scanned negative and positive films as well as scanned printed photos.

How it works

Neat Image uses sophisticated math and advanced noise reduction algorithms to detect and reduce noise while accurately preserving the image details. According to ABSOft: “The code in Neat Image embodies years of our math and practical imaging — all to give the user smooth images.”

ABSOft has optimized Neat Image for speed by taking full advantage of multi-core CPUs and GPUs. Be aware not all GPUs are currently supported. I was surprised to discover my AMD Radeon Pro W5700X in my 2019 Mac Pro was not supported. But this wasn't a deal breaker since it worked just fine off of my 12 core CPU. BTW: Tech support just told me that they plan to make the W5700X compatible in a future update.

Neat Video is very simple to use. It has four buttons that cross the top of its window: Input Image, Device Noise Profile, Noise Filter Settings, and Output Image. Basically you just push one after the other to import the photo, automatically clean up the noise, and then export your photo. Most times this will be enough to get a good result. But there will be times when you need to set a few preferences to get the best results.

The Device Noise Profile window (Figure 1) has an Auto Profile button. This will take all the guesswork out of the process by

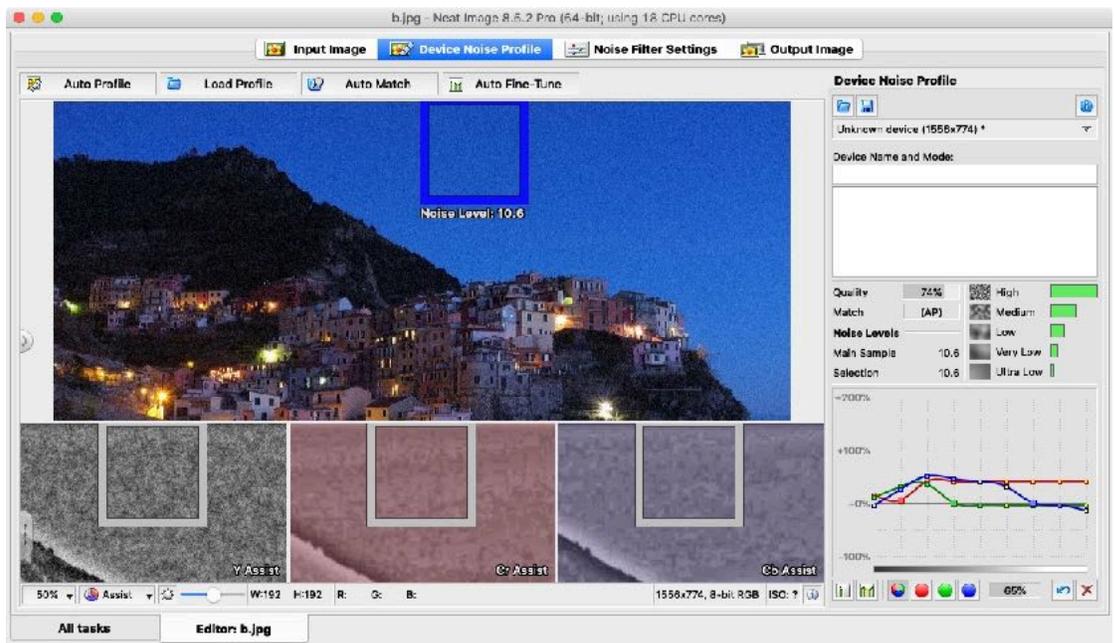


Figure 1. Neat Image's “Auto Profile” found a good spot to use in its processing out of the noise in this photo.

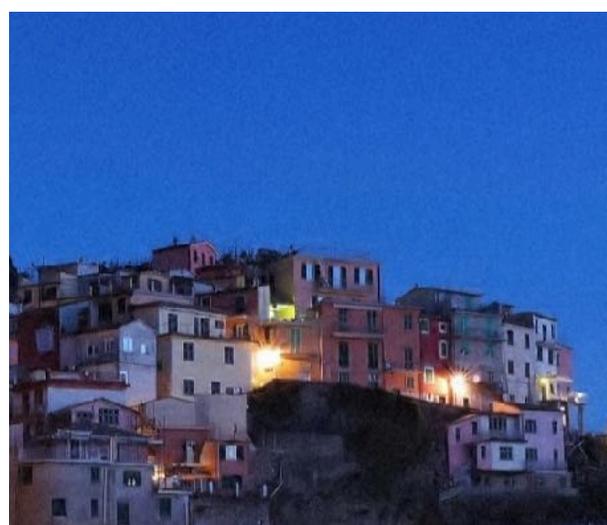
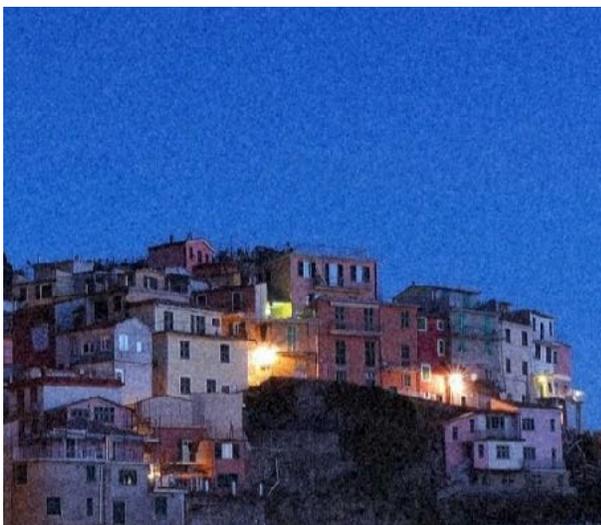


Figure 2. These are cropped, close-up, before/after views from the Figure 1 image. This is the result of using the default settings - no additional tweaking of the settings were performed.

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doing everything for you, e.g. it will look in your image for areas that contain visible noise but contains no visible details. Usually, Neat Image will find these featureless areas automatically. But if it has trouble, you can help it find a featureless area.

In Figure 1 you can see that Neat Video placed a blue box in part of the night sky. Notice that there are no buildings, clouds, or anything else within that box. So it is perfect for the Profiling process.

If you want, you can load or save profiles for your cameras and then use these to process your videos now or in the future.

When you are satisfied with the selection, you move on to the “Noise Filter Settings” button/window (Figure 3). This will prepare a preview for you, letting you compare the original photo to the processed version. You can also make further modifications to the final look using the settings in this window.

Noise Image lets you create up to four “Variants”, each with its own set of filters settings. This lets you quickly switch between them to evaluate their previews and then pick the one that looks best.

When the preview image looks good to you, click on the Output Image button. BTW: The output image defaults to 8-bit per channel, but the Pro version lets change it to either 16 or 32-bits per channel. Finally, click the “Save output image button” and you are done.

Noise Image has a Batch Processing functionality so it can process many images at once. This processing is done in the background, which lets you continue working on other images at the same time.

Neat Image will import and save these file formats: TIFF, JPEG, PNG. RAW images must be converted to TIFFs (using TIFF is recommended to avoid quality loss due to compression) or to JPEGs (this involves quality loss, because JPEG is a lossy format) before processing. The minimum size of an input image is 40x40 pixels; the maximum size is usually limited by the amount of available system RAM.

If you would like to see more examples, I suggest that you go to the [Neat Image Examples](#) web page. There are 19 before/after images that show Neat Video’s filter cleaning up various types of noise distortions. There is also a “[Basic Workflow](#)” video that shows how to use Neat Image.

Neat Image reduces these kinds of noise:

Luminance noise	Color (chroma) noise	Electronic interference noise
Banding noise	Salt-and-pepper (impulse) noise	In-camera noise reduction artifacts
Film grain	JPEG artifacts	Some other image imperfections

Neat Image is available as a standalone application or as a plug-in for Photoshop. BTW: It can also be use as an External Editor in Lightroom. There is a [compatibility web page](#) that shows the supported applications (for the plug-in) and the currently compatible GPUs. There is also a [Features](#) web page that shows the differences between the Home and Pro versions.

The Skinny

Evaluation: Neat Image is very easy to use and very effective in removing unwanted noise in your photos.

Requires: Mac OS X 10.7.5 - 10.15

Company: [ABSsoft](#)

Price: Standalone version OR the plug-in for Photoshop Home version: \$39.90

Standalone version OR the plug-in for Photoshop Pro version: \$79.90

Standalone version AND the plug-in for Photoshop Home version: \$49.90

Standalone version AND the plug-in for Photoshop Pro version: \$99.90 [all are currently on sale]

[Available Trial Copy](#)

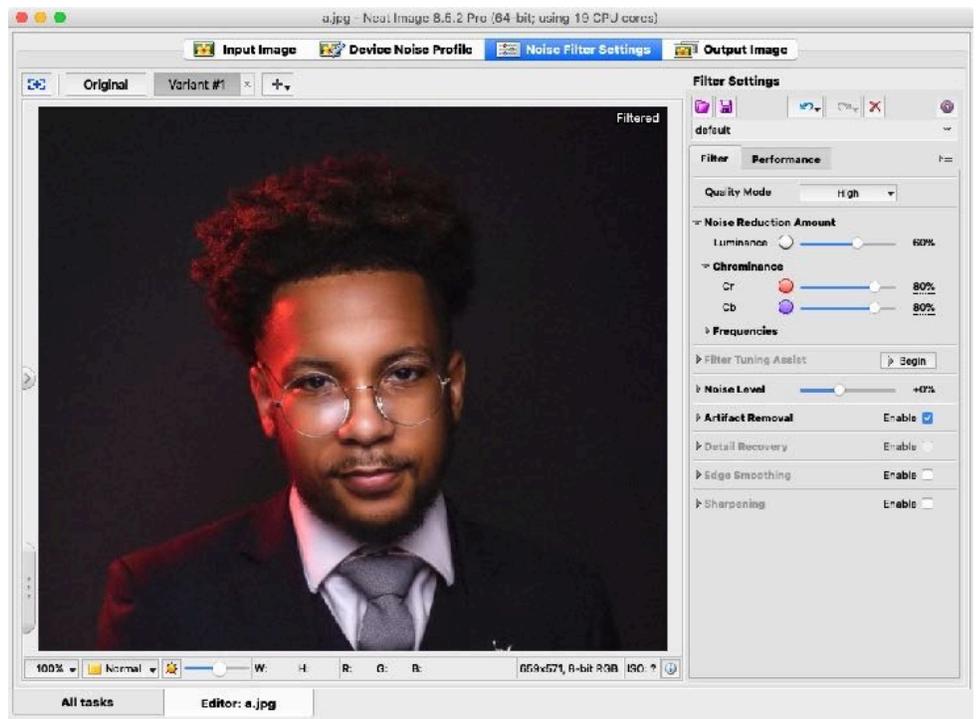


Figure 3. This is Neat Image’s Noise Filter Settings window. It is currently showing a preview of a processed photo. All of the noise was removed.