

**S**harpening is an essential final step before output. But sometimes, you don't want to sharpen your entire image equally. Skin tones, clouds, noisy areas - it's best to apply less sharpening to these areas, lest you end up introducing unwanted textures and artifacts. Fortunately, it's easy to selectively apply sharpening using the layer masking techniques that you've already learned about.

For this tutorial, you'll need to download the image *Portrait.tiff* from the companion web site at [www.completedigitalphotography.com/CDP6](http://www.completedigitalphotography.com/CDP6). Our intent with this image is to print it out as an 8" [ts] 10" print on an Epson photo ink-jet printer. As such, it has already been resized to 8" [ts] 10" at 240 dpi. (Note that because this image was shot in the 3:2 aspect ratio of 35mm film, 10" wide results in a height of 6.6".)

#### **STEP 1: OPEN THE IMAGE**

In Photoshop, open the image *Portrait.tif* (Figure 1). Because all sharpening should be performed at a zoom ratio of 100 percent, you should zoom in to the image and look around to scope out the edge detail and begin to assess which areas could use more or less sharpening. (You can zoom to 100% by pressing Ctrl/Cmd-I.)



*This image was taken with a Canon SLR. By default, most SLRs apply very little sharpening.*

*Here we want to sharpen some areas but not others.*

#### **STEP 2: PREPARE THE LAYERS**

In the Layers palette, duplicate the base layer by dragging it onto the Create a New Layer button at the bottom of the palette.

Add a Layer Mask to the duplicate layer by selecting the layer and then clicking Layer > Layer Mask > Reveal

All. In the next step, it will become clear why we selected Reveal All rather than Hide All.

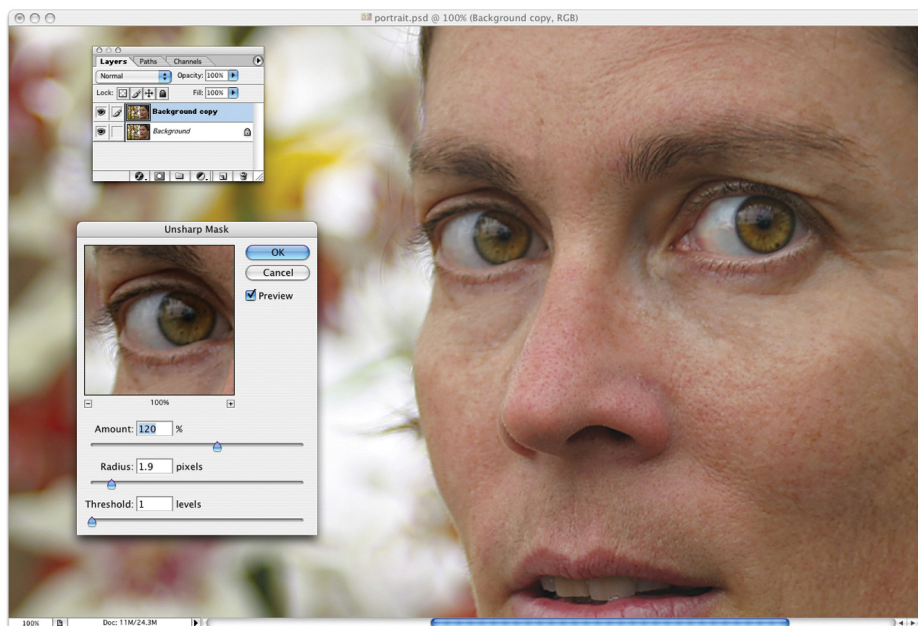
### STEP 3: DETERMINE MAX AMOUNT OF SHARPENING

As you've already seen, by painting into a Layer Mask with gray, we can make that layer more or less visible. Our plan here is to sharpen the top layer and then paint into its Layer Mask to control which areas of the sharpened image are visible. In other words, because of our Layer Mask, some parts of the sharpened layer will be visible, and the original softer image will be visible in other parts. This technique effectively lets us "paint" sharpening into our image.

Our next step is to apply sharpening to the upper layer. To determine correct sharpening settings, we want to pick the area where we want the most sharpening and sharpen it accordingly. This level of sharpening will be applied to the entire image. We will then use our mask to paint in lesser amounts in areas where the max sharpening is too much.

In the Layers palette, click the image icon in the top layer to select it. Remember, when you have a Layer Mask attached to a layer, you can switch between editing the image data and the Layer Mask data by clicking the appropriate thumbnail in the Layers palette.

We know we want the most sharpness in the woman's eyes, so zoom in on her eyes and click Filter > Sharpen > Unsharp Mask (see Figure 2).



First, choose a sharpening level based on the area that needs the most sharpening. This maximum sharpen will be applied to a copy of the image, stored in a second layer.

As previously mentioned, digital SLRs often tend to produce soft images, so this picture can withstand rather aggressive sharpening. Feel free to sharpen to your personal taste. I chose an Amount setting of 120 percent, a Radius of 1.9, and a Threshold of 1. Again, you need to be focusing only on the woman's eyes. Note, however, that the sharpening effect is increasing the contrast on her skin, which can make it look rough and blotchy.

After you've found the settings you like, click OK.

#### **STEP 4: MASK THE ENTIRE IMAGE**

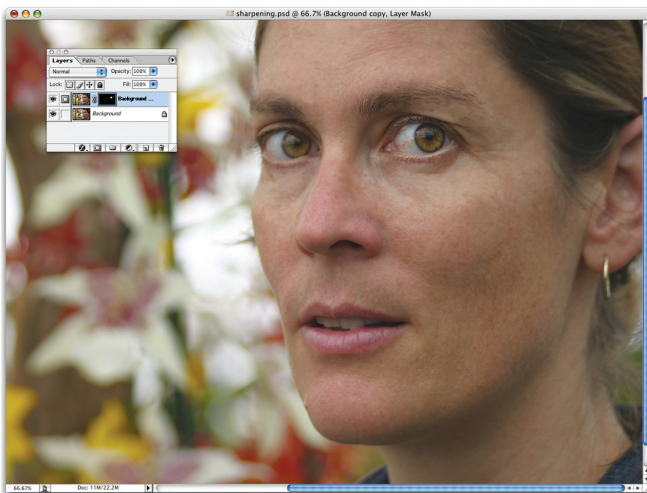
We're ready to start painting our mask, so click the mask icon in the upper layer. Select black as the foreground color, select the Paint Bucket, and then click somewhere on the image. The image should go soft because the sharpened layer is now completely masked, revealing the original layer. (If your image turns black, you haven't properly selected the mask layer. Click Undo, and try again.)

### Keep an Eye on the Control Bar

*If you ever find any painting tools[md]for example, the Paint Bucket, Brush, Clone Stamp, or any other painting tool[md]acting weird, check the Control Bar at the top of the screen and ensure that Opacity, Mode, and other settings are properly configured.*

#### **STEP 5: SHARPEN THE EYES**

You can now apply varying amounts of sharpening by simply painting into the mask using the Brush tool. With the mask still selected, choose white as the foreground color and begin painting over the woman's eyes. This will reveal the fully sharpened layer (see Figure 3).



*Here, the upper, sharpened layer has been completely masked. Next, a white brush was used to paint over the eye, knocking a hole in the mask to reveal the sharpened eye from the upper layer. With this technique, we can paint in sharpening only where we want it.*

**STEP 6: MASK THE EDGES OF HER FACE**

The edge of her face and nose can also withstand full sharpening, although you might need to use a very small brush to keep from sharpening the skin tones around the edge. Her ear is far enough in the distance that it's soft simply because of shallow depth of field. It needs no sharpening.

**STEP 7: MASK HAIR AND SKIN TONES**

Hair is a detail that looks nice when sharp, but the hair in this image does not need full sharpening. Select a 50 percent white color (or, if you're more of a pessimist, select a 50 percent black color) and paint over the hair. This will effectively apply half the sharpening effect.

You might also want to experiment with applying a little sharpening to the skin tones, especially around the eyes. By selecting different gray tones, you can add more or less sharpening. What's more, if you don't like the effect, you can simply repaint it with a different color, or you can paint with black to eliminate it. Figure 4 shows our final image and our final layer mask.



*Our final, sharpened image, along with the mask that was painted to constrain the sharpening effect.*

This same approach can be used to non-destructively and selectively apply any type of filter or operation. You can use it to variably add noise, blur, sketch effects, or any other alteration that can be made to a layer. Want to change the color of one element in an image? Just duplicate your base layer, alter its color using any method you like, and then use a Layer Mask to “paint in” only the altered areas you want.

Sharpness is a very subjective quality, and different people think different amounts of sharpness are “correct.” What’s more, some images might need more or less sharpening, depending on their content. Facial textures *very* rarely need a lot of sharpening, as most people don’t appreciate it if you render every pore, hair, and line with terrific clarity. Some people also believe that foreground images don’t need to be sharpened as much as more distant objects, since foreground objects are larger and easier to see. Others believe foreground elements need *more* sharpening *because* they’re larger and easier to see.

If all this sounds confusing, remember to judge your final sharpening in your actual output. If your final output is a print, you need to judge your sharpening by looking at the print. Too much sharpening will make the image appear busier[md]sharp edges will have bright and dark lines around them.