



Adobe
Photoshop
2020 release



CLASSROOM IN A BOOK®

The official training workbook from Adobe

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Blurring a background

The interactive blurs in the Blur Gallery let you customize a blur as you preview it on your image. You'll use an iris blur to blur the background in an image, focusing the viewer's attention on the main attraction—in this case, the egret. You'll apply the blur as a Smart Filter so that you have the option of changing it later.

You'll start by looking at the start and end files in Bridge.

- 1 Choose File > Browse In Bridge to open Adobe Bridge.
- 2 In the Favorites panel in Bridge, click the Lessons folder. Then, in the Content panel, double-click the Lesson05 folder to open it.
- 3 Compare the Egret_Start.jpg and Egret_End.psd thumbnail previews.



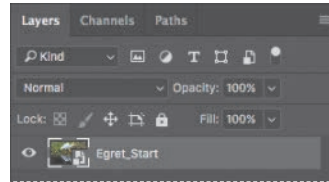
Egret_Start.jpg



Egret_End.psd

In the final image, the egret appears sharper, as its reflection and the grass around it have been blurred. Iris Blur, one of the interactive blurs in the Blur Gallery, makes the task an easy one—no masking required.

- 4 Choose File > Return To Adobe Photoshop, and choose File > Open As Smart Object.
- 5 Select the Egret_Start.jpg file in the Lesson05 folder, and click OK or Open.



Photoshop opens the image. There is one layer in the Layers panel, and it's a Smart Object, as indicated by the badge on the layer thumbnail icon.

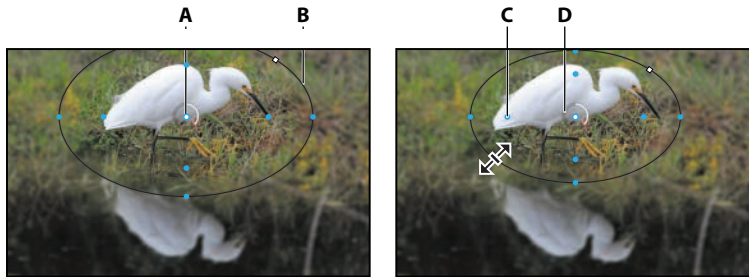
- 6 Choose File > Save As, choose Photoshop for the Format, name the file **Egret_Working.psd**, and click Save. Click OK in the Photoshop Format Options dialog box.

7 Choose Filter > Blur Gallery > Iris Blur.

A blur ellipse is centered on your image. You can adjust the location and scope of the blur by moving the center pin, feather handles, and ellipse handles. At the top right corner of the Blur Gallery task space, you also see the expandable Field Blur, Tilt-Shift Blur, Path Blur, and Spin Blur panels; those are additional types of blur you can apply.

8 Drag the center pin so that it's at the bottom of the bird's body.

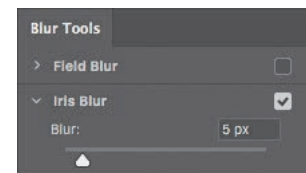
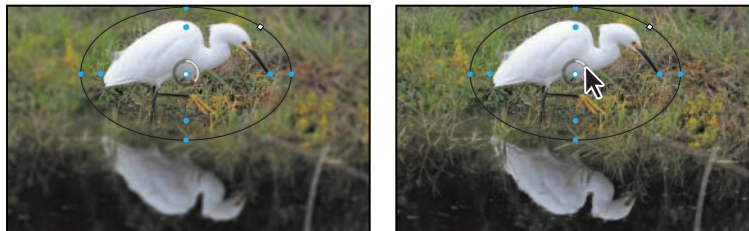
9 Click the ellipse, and drag inward to tighten the focus around the bird.



A. Center **B.** Ellipse **C.** Feather handle **D.** Blur

10 Press Alt (Windows) or Option (Mac) as you click and drag the feather handles to match those in the first image below. Pressing Alt or Option lets you drag each handle separately.

11 Click and drag on the Blur ring to reduce the amount of blur to 5 px, creating a gradual but noticeable blur. You can also change the same value by moving the Blur slider in the Iris Blur area of the Blur Tools panel.



12 Click OK in the options bar to apply the blur.

The blur may be a little too subtle. You'll edit the blur to increase it slightly.

13 Double-click Blur Gallery in the Egret layer in the Layers panel to open it again. Adjust the blur to 6 px, and click OK in the options bar to apply it.

The egret is accentuated by blurring the rest of the image. Because you applied the filter to a Smart Object, you can hide or edit the effect without altering the original image.

14 Save the file, and then close it.

Tip: If you have an iPhone camera that produces an HEIF depth map, such as an iPhone Plus or iPhone X, you can create a more realistic background blur effect by loading the depth map into the Lens Blur filter (Filter > Blur > Lens Blur).

Blur Gallery

The Blur Gallery includes five interactive blurs: Field Blur, Iris Blur, Tilt-Shift, Path Blur, and Spin Blur. Each gives you on-image selective motion blur tools, with an initial blur pin. You can create additional blur pins by clicking on the image. You can apply a single blur or a combination of blurs, and you can create a strobe effect for path and spin blurs.

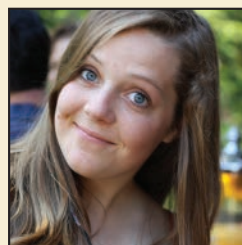


Before

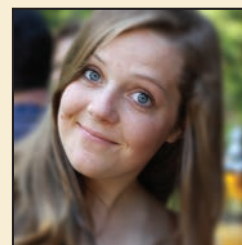


After

Field Blur applies a gradient blur to areas of the image, defined by pins you create and settings you specify for each. When you first apply Field Blur, a pin is placed in the center of the image. You can adjust the blur relative to that point by dragging the blur handle or specifying a value in the Blur Tools panel; you can also drag the pin to a different location.



Before



After

Iris Blur simulates a shallow depth-of-field effect, gradually blurring everything outside the focus ring. Adjust the ellipse handles, feather handles, and blur amount to customize the iris blur.



Before

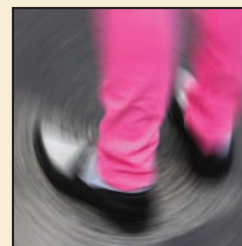


After

Tilt-Shift simulates an image taken with a tilt-shift lens, where the image has very shallow depth of field with the focus point in the distance. This blur defines areas of sharpness and then fades to a blur at the edges. You can use this effect to simulate photos of miniature objects.

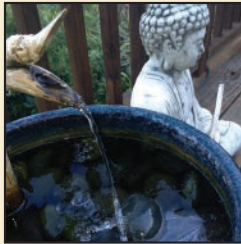


Before



After

Spin Blur is a radial-style blur measured in degrees. You can change the size and shape of the ellipse, re-center the rotation point by pressing Alt or Option as you click and drag, and adjust the blur angle. You can also specify the blur angle in the Blur Tools panel. Multiple spin blurs can overlap. Can be useful for illustrating the rotation of propellers, wheels, or gears.



Before



After

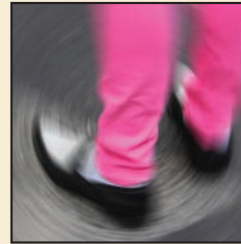
Path Blur creates motion blurs along paths you draw. You control the shape and amount of the blur.

When you first apply a Path Blur, a default path appears. Drag the end point to reposition it. Click the center point and drag to change the curve. Click to add additional curve points. The arrow on the path indicates the blur's direction.

You can also create a multiple-point path or a shape. Blur shapes describe the local motion blurs, similar to camera shake (see "Camera Shake Reduction" on page 142). The Speed slider in the Blur Tools panel determines the speed for all the path blurs. The Centered Blur option ensures that the blur shape for any pixel is centered on that pixel, resulting in more stable-feeling motion blurs; to make the motion appear more fluid, deselect this option.

If you wanted to illustrate the blurs of individual animal legs moving in different directions, you could add a separate instance of Path Blur to each leg.

Some blur types provide additional options in the **Effects** tab, where you specify the bokeh parameters to control the appearance of blurred areas. Light Bokeh brightens the blurred areas; Bokeh Color adds more vivid colors to lightened areas that aren't blown out to white; Light Range determines the range of tones that the settings affect.

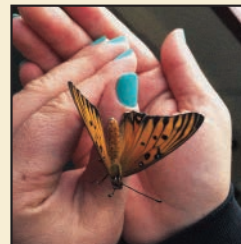


Before

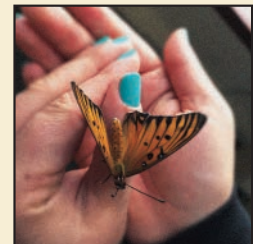


After

You can add a **strobe effect** to spin and path blurs. Select the **Motion Effects** tab to bring its panel forward. The Strobe Strength slider determines how much blur shows between flash exposures (0% gives no strobe effect; 100% gives full strobe effect with little blur between exposures). Strobe Flashes determines the number of exposures.



Before



After

Applying a blur will smooth out visible digital image noise or film grain that's in the original image, and this mismatch between the original and blurred areas can make the blur appear artificial. You can use the **Noise** tab to restore noise or grain so that blurred areas match up with unblurred areas. Start with the Amount slider, and then use the other Noise options to match the character of the original grain. Increase the Color value if the original has visible color noise, and lower the Highlights value if you need to balance the noise level in the highlights compared to the shadows.

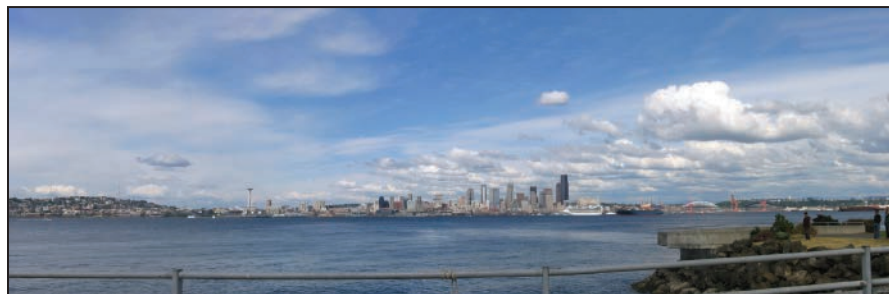
Creating a panorama

Sometimes a vista is just too large for a single shot. Photoshop makes it easy to combine multiple images into a panorama so that your viewers can get the full effect.

Once again, you'll take a look at the end file first, to see where you're going.

- 1 Choose File > Browse In Bridge.
- 2 Navigate to the Lesson05 folder, if you're not there already. Then, look at the Skyline_End.psd thumbnail preview.

► **Tip:** In Bridge, you can preview a selected image in full screen mode by pressing the spacebar. This is useful for previewing detailed or large images such as a panorama. Press the spacebar again to close the preview.



Skyline_End.psd

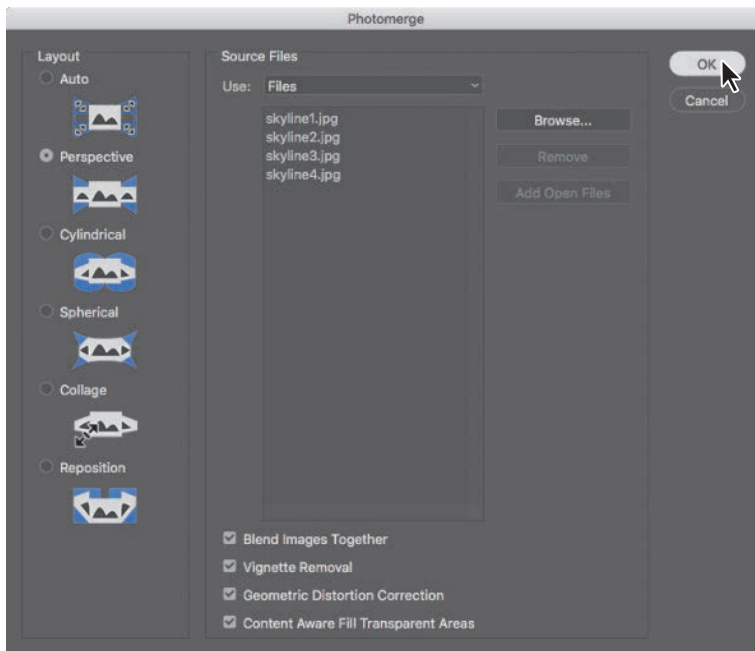
You'll combine four shots of the Seattle skyline into a single wide panorama image so that viewers get a sense of the whole scene. Creating a panorama from multiple images requires only a few clicks. Photoshop does the rest.

► **Tip:** You can also open selected images from Bridge directly into Photomerge by choosing Tools > Photoshop > Photomerge.

- 3 Return to Photoshop.
- 4 With no files open in Photoshop, choose File > Automate > Photomerge.
- 5 In the Source Files area, click Browse, and navigate to the Lesson05/Files For Panorama folder.
- 6 Shift-select all the images in the folder, and click OK or Open.
- 7 In the Layout area of the Photomerge dialog box, select Perspective.

The best option for merging photos isn't always Perspective; it depends on how the originals were photographed. If you're not completely happy with the result of a particular merge, you can always try again with a different Layout option. If you're not sure which one to use, you can simply click Auto.

- 8 At the bottom of the Photomerge dialog box, select Blend Images Together, Vignette Removal, Geometric Distortion Correction, and Content Aware Fill Transparent Areas. Then click OK.



Blend Images Together blends images based on the optimal borders between them, instead of just creating a simple rectangular blend. Vignette Removal performs exposure compensation in images with darkened edges. Geometric Distortion Correction compensates for barrel, pincushion, or fisheye distortion. Content Aware Fill Transparent Areas automatically patches the empty areas between the merged image edges and the sides of the canvas.

Photoshop creates the panorama image. It's a complex process, so you may have to wait a few moments while Photoshop works. When it's finished, you'll see the full vista in the image window with five layers in the Layers panel. The bottom four layers are the original four images you selected. Photoshop identified the overlapping areas of the images and matched them, correcting any angular discrepancies. The top layer, containing "(merged)" in the layer name, is a single panorama image blended from all of the images you selected, combined with formerly empty areas filled in by Content Aware Fill. Those areas are indicated by the selection.

● **Note:** Photomerge will require more time when you merge more images, or images with large pixel dimensions. Photomerge works faster on computers that are newer or that have more RAM.



► **Tip:** If you want to see how the panorama looks without the areas created by Content Aware Fill, hide the top layer.