

Stockton Camera Club

The Shutter Tripper September 2022

Live From Stockton!



It's The Camera Club's Monthly In Person Meeting

SCC Officers 2022

President

Heide Stover

Email: h1stover@aol.com

Vice President Programs

Dean Taylor - 986-9848

Email: ditaylor49@aol.com

Vice President Competition

Wayne Carlson - 912-8442

Email: photowlcrec@att.net

Secretary

Em McLaren - 823-7287

Email: emmclaren@comcast.net

Treasurer

Sharon McLemore - 401-0192

Email: sfmsap@aol.com

Committee Chairs

Hospitality Chairperson

Print Competition Chairperson

Trey Steinhart - 471-8438

Email: Steinhart4@sbcglobal.net

Refreshments Chairperson

Sheldon McCormick 931-0461

Email: smccormick11@hotmail.com

Shutter Tripper/Educational

Doug Ridgway - 617-7050

Email: doug_flyfisher@yahoo.com

Web Master

Janelle DeRuosi - 838-1881

Email: jderuosiphotography@gmail.com

President's Message

August 2022

By Heide Stover

August was our potluck month, no competition meeting. Sharon opened her home to the club for the potluck. I did not attend but heard only positive comments. Thanks to Sharon for sharing her home.

September we will be meeting in person back at the bowling alley.

Till then, happy shooting!

Heide

A Big Thank You to Our Sponsors!



182 West Adams Street

(On the Miracle Mile Across From The Valley Brew)

Stockton, CA 95204-5338

Phone: 209-464-2299/Fax: 209-464-9229

Phone: 209-464-2299/Fax: 209-464-9229

www.ulmerphoto.com

Email: Ulmerphoto@aol.com

2022 Calendar of Events		
Every 3rd Thursday (Except April & Aug) 6:30 PM	Location	Membership Meeting Contact Heide Stover h1stover@aol.com
Thursday September 15	West Lane Bowling Alley Stockton	September General Meeting Special Subject - Things That Float
Thursday October 20	West Lane Bowling Alley Stockton	October General Meeting Special Subject - Monochrome
Thursday November 17	West Lane Bowling Alley Stockton	November General Meeting Special Subject - Open Prints Only
Thursday December 15	West Lane Bowling Alley Stockton	December General Meeting Special Subject - Optical Illusions
2023 Calendar of Events		
January	TBA	Annual Banquet
Thursday February 16	West Lane Bowling Alley Stockton	February General Meeting Special Subject - Bokeh
Thursday March 16	West Lane Bowling Alley Stockton	March General Meeting Special Subject - Circles
Thursday May 18	West Lane Bowling Alley Stockton	May General Meeting Special Subject - Abstract
Thursday June 15	West Lane Bowling Alley Stockton	June General Meeting Special Subject - Prints Only (No Special Subject)

Stockton Camera Club
July 2022 Competition Standings
Congratulations to the winners!!!

Because the bowling ally conference room was not available for SCC competition,
our meeting was held via Zoom.

1st Place - Flying Across the Super Moon in San Francisco - Doug Ridgway

2nd Place - Tundra Swan Over Morning Reflection - Heide Stover

3rd Place - Sandhill Cranes Dancing - Heide Stover

Please check out the website <http://www.stockton-cameraclub.com/home.html>”

Class A Standing	TOTAL	OPEN	SS	FEB	MAR	MAY	JUN	JULY	SEPT	OCT	NOV	DEC
Class AA Standing												
Heide Stover	187	150	37	37	38	37	36	39	0	0	0	0
Wayne Carlson	185	147	38	38	38	37	36	36	0	0	0	0
Ron Wetherell	150	121	29	38	0	36	39	37	0	0	0	0
Joan Erreca	92	75	17	32	0	26	0	34	0	0	0	0
Christine Blue	67	58	9	30	0	0	0	37	0	0	0	0
Ren Wright	44	35	9	0	0	9	35	0	0	0	0	0
Karleen Gansberg	35	27	8	32	0	0	0	0	0	0	0	0
Elizabeth Parrish	35	27	8	0	35	0	0	0	0	0	0	0
Sheldon McCormick	32	24	8	32	0	0	0	0	0	0	0	0
Darrell O’Sullivan	0	0	0	0	0	0	0	0	0	0	0	0
Lanny Brown	0	0	0	0	0	0	0	0	0	0	0	0
Class AAA Standing												
Joanne Sogsti	193	153	40	38	39	39	38	39	0	0	0	0
Em McLaren	192	154	38	39	39	36	38	40	0	0	0	0
Dean Taylor	190	151	39	39	37	39	38	37	0	0	0	0
Sharon McLemore	189	152	37	38	37	36	39	39	0	0	0	0
Doug Ridgway	189	151	38	38	37	39	37	38	0	0	0	0
Trey Steinhart	185	146	39	36	36	37	37	39	0	0	0	0

2022 Competition Policy

A. GENERAL RULES

1. Only paid-up members may enter club competition.
2. Regular print and digital image competition period: Once each month except January. A competition year is February through December. Current regular meetings are February, March, May, July, September, October and December. The number of meetings may change from time to time at the discretion of the Board of Directors and approval of the general membership as facilities permit. The Annual Awards Dinner will be held in January.
3. A total of four (4) images (all prints, all digital or a combination of both) may be entered each competition month. A total of three (3) images may be entered in the Open Division and a total of one (1) in the Special Subject Division. The number of entries may change from time to time at the discretion of the Board of Directors and the approval of the general membership.
4. Each image will be scored from 6 to 10 points. All prints or digital images receiving 9 or 10 points will be classed as an honor image. The title of each print or digital image entered will be read before being evaluated. The name of the maker will be read for 9-point honor winners. Maker's names will be announced for the 10 point images after the Print & Digital Image-of-the-Month winners are chosen.
5. A print or digital image that does not receive an honor score, may be re-entered one more time in the same division.
6. A print or digital image may be entered in all divisions for which it qualifies; i.e., an honor image in Open may also be entered in the Special Subject Division at another competition. A print or digital image that receives an honor score may not be re-entered in the same division.
7. Any print or digital image that appears to be ineligible for competition or not qualified for a specific division could expect to be challenged. The Competition Vice-President shall decide whether or not the image is acceptable.
8. The exhibitor must have exposed each negative, slide or digital image entered. All images submitted for judging must be the work of the photographer/maker including the taking of the images and any digital enhancements and/or manipulation of the image. This does not apply to the processing of film or printing by a commercial processor.
9. The same image should not be entered both as a print and a projected digital image in the same competition.
10. In the event of absence or barring unforeseen circumstances, a member may submit make-up prints or digital images for one competition night per competition year; and whenever possible must submit all make-up prints or digital images at the meeting immediately following the month a member failed or was unable to submit the prints or digital images. Make-ups in the Special Subject Division must be the same subject as the month missed. Also, in case of absence a member may assign the responsibility of submitting his or her prints and/or digital images for competition to another member.
11. A club member who serves as judge cannot enter his or her own prints or digital images in the same competition. The judge's make-up prints or digital images can then be entered in another competition during that competition year. This is in addition to the once-a-year make-up provision already

allowed.

12. Prints or digital images may be projected/viewed briefly before the judging of each division if the judge indicates he/she would like a preview.

B. PRINT ENTRY RULES

1. Each print entered must have a completed label attached to the back of the print including; name of maker, title, date entered and Division (Open or Special Subject). The writing or printing on the form must be legible. Labels must be attached on the back of the print in the upper left-hand corner for correct viewing of the print.
2. All prints must be matted or mounted with a total size (including mat board) of no larger than 18" X 24" and no smaller than 8" X 10". Exception: One side of a Panorama Print may be no larger than 36". Prints that are smaller than 5" X 7" will not be accepted. The maker's name must not appear on the viewing surface of the image. Framed prints shall not be entered.
3. Prints accompanied by entry forms should be submitted no later than 15 minutes prior to the start of the regular monthly meeting.
4. Prints receiving a score of 10 points, in each class, will be regrouped and judged for selection for the Print-of-the-Month honors. Print-of-the-Month honors will be given in Class A, AA & AAA.

C. DIGITAL IMAGE ENTRY RULES

1. Digital images must be submitted in a format and by the deadline specified by the Competition Vice-President. Digital images may be submitted by email, mailed (CD) or delivered (CD) to the Competition Vice-President. Definition of Digital Image: An image taken with a digital camera, a negative, slide or print scanned into the computer and processed digitally.
2. Images must be in a format compatible with the projector. The key thing to keep in mind when formatting photos for submission is that the projector we use in the competition has a (maximum) resolution of 1400 x 1050 pixels. This means that any photo that exceeds this size in either dimension, could end-up being cropped by the projector. In other words: the image width cannot be more than 1400 pixels and the image height cannot be more than 1050 pixels. If your image is horizontal, only change the width to 1400, if your image is vertical, only change the height to 1050. Do not change both. Down-sizing the image from the "native" resolution coming out of your camera also significantly reduces the file size. This helps when emailing the files and takes-up less space on our hard-drives.
3. The maker's name, title of image, date entered and division (Open or Special Subject) must be included as the title of the image. When you have finished re-sizing your image save your image with a new title. For example do a Save as: Smith Sunrise Splendor 05-15 O.jpeg. (O-Open or SS-Special Subject). Specify whether you're Beginner, Advanced or Very Advanced.
4. Digital Images receiving a score of 10 points, in each class, will be regrouped and judged for selection for the Digital Image-of-the-Month honors. Digital Image-of-the-Month honors will be given in Class A, AA & AAA.

[Levitation Photography Tutorial: Make Everything Float in Air](#)



One evening, when I was lying on the bed with my laptop and camera bag next to me; editing some of my photos; and boom! This happens!

Houston, we have a problem.

Levitation Photography

You may have not heard of the terminology, but you must have definitely seen some stunning levitation photography on the internet. In levitation pictures, everything seems to be defying gravity. The model is floating, the objects around are floating and everything is floating.

Levitation photography is a simple concept of layer masking in Photoshop. To break it down in simple terms, a picture of the scene is taken without any props and models. Later, several pictures are taken with the model and the props by suspending them in air. Then they are all brought together in Photoshop by layer masking to form one image after eliminating the suspending equipment using the first image of the blank scene. Some photographers also prefer to use the cropping method rather than layer masking.

When you [learn video editing](#), you learn that there are two phases to creating a levitation shot that are shooting and post-processing.

Shooting

1. Work up a scene

Levitation photography is a creative process. You don't actually need a pricey camera for it, even a basic point and shoot camera will help you create a good levitation photograph. Just work up a good scene. Think of various different positions in which you can make your model float in the air and how is it that you will do it. Normal methods which photographers use to suspend their model are:

- Using ropes. Use real strong ones so they can support the weight of the model.
- Using a trampoline or jump method, ask your model to jump up in the air while making the desired pose. Use burst mode to capture shots in succession.
- Using stools, tables, chairs or any other furniture for support.

But you don't have to stick to only these methods. Whatever (safe) method that you can come up with to float your model, will work.

Learn Photography

Master the fundamentals of photography, from the basics to advanced techniques, and become a professional photographer.

[Start Your Free Course](#)



2. Set-up your camera

Apart from the trampoline method, if you are using any other support methods to keep you model suspended in the air, then you will have to use the tripod. Set your focus on the model and compose your scene to start shooting. Before you start taking pictures of the model, it's best to take a picture of the blank scene.



I used the support method here. I used this bucket to get myself in the position and used the self timer on my camera to get this shot.



I couldn't actually balance myself on the bucket. My tummy hurt. So, I waited for the self-timer to go off and just as it was about to happen, I posed.



It's a good strategy to include some props as well in your picture. It creates a better impact and adds to the story behind your scene.

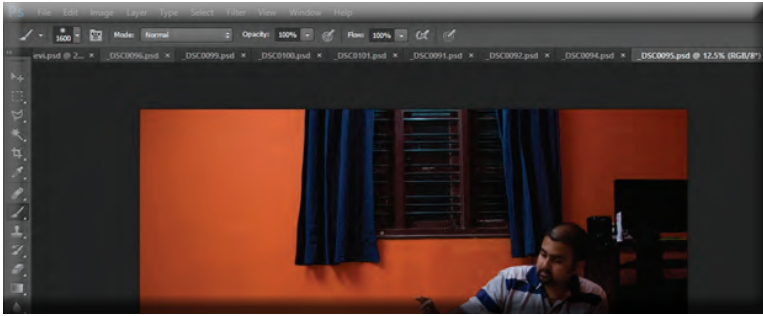
It's important to shoot the props as well in the same lighting condition. If you shoot the props in a different light, it will easily show when you try to bring them in the scene together. It will make the whole picture look artificial.

Once you have taken all the necessary shots, move on to processing your images and creating your levitation photograph.

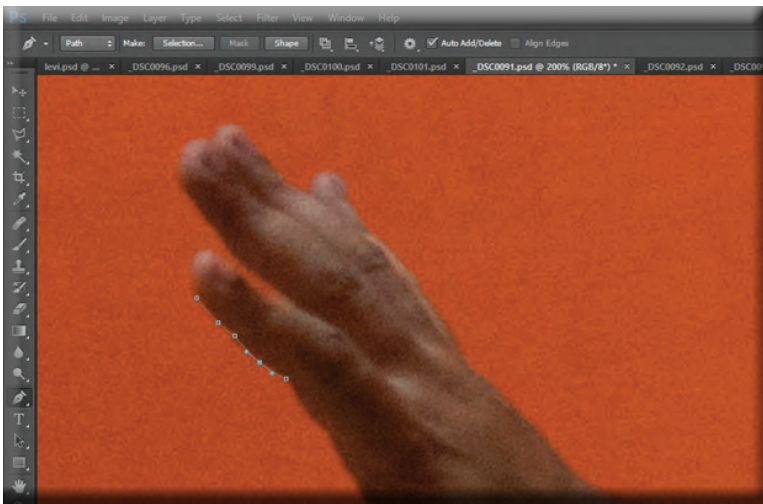
Processing

Import all your images in photoshop.

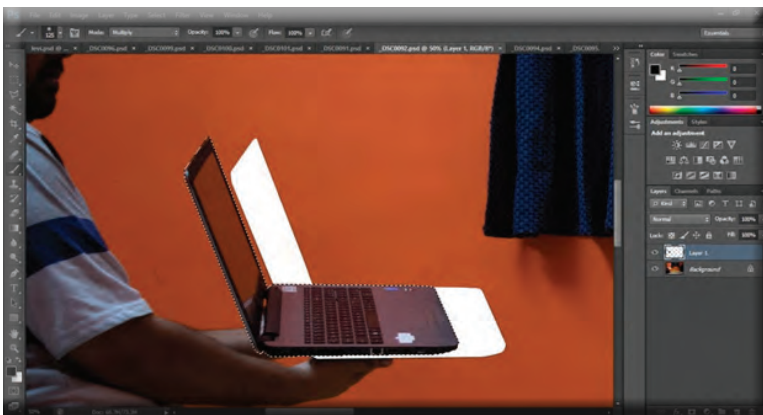
If you have shot a raw photo, you can make minor adjustments in camera [RAW](#) at this point, sync all your images and open them in Photoshop. Open them all in different Photoshop windows.



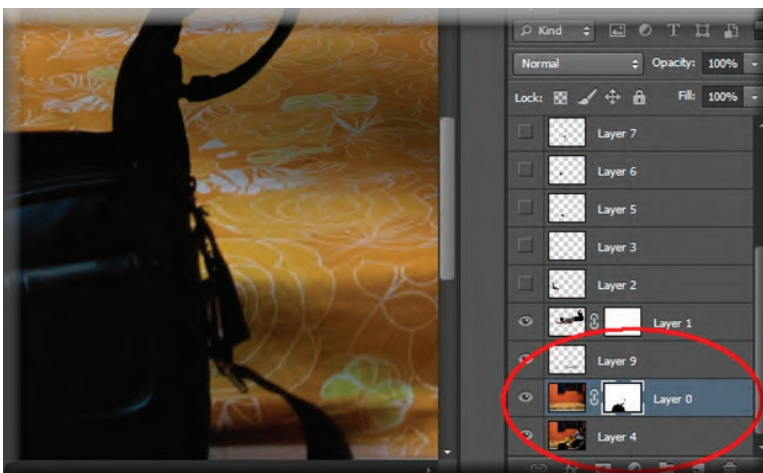
Crop out the model and other props
Use the pen tool to draw a path along the contours of the model.



Make the selection from the path by right clicking on the image. Press ctrl + X (command + X for mac) and then ctrl + v (command + V for mac) this will cut the selection out and place it on a separate layer on top of the image.

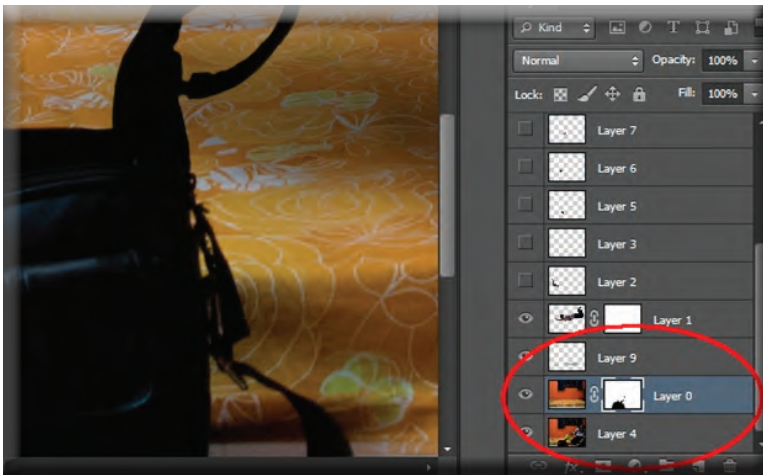


Do this for all the props as well and save these files separately (just in case).



Layer mask if necessary

To bring out the camera bag in front I will use the layer masking method. Since I am not going to move it from its position in our levitation scene, it's easier to just layer mask it under the blank scene and bring out the bag in the blank scene.



Start creating your scene

Open the blank scene image. Go to the file where you had the model cropped. Ctrl + click on the layer in the layers panel to select the model. Press ctrl + c to copy this layer. Go back to the file with the empty scene and paste your model here. I will also tilt the position a bit to give a more floating effect. Continue to do so with all the other props and bring them into the scene.



Add the final touches

Crop and compose the scene further if necessary. I am going to increase the structure and saturation a bit in nik viveza (Photoshop plugin).



Points to remember

Mind the light condition and direction. Shoot all the images under the same circumstances. Or else they will not come together when you overlay them in Photoshop layers.

Think out of the box. You are trying to levitate, it's something fantastic. Create fantastical scenes.

Looking to sharpen your photography skills? Join our top-rated [Professional Diploma in Photography](#) today!
Join 12+ million students who already have a head start.

Sign up today and get 4 weeks free!

[Start now for free](#)

No commitments. Cancel at any time.

To learn more about how Upskillist can help you click the button below:

[Contact Us](#)



Levitation Photography Techniques and Tips

3 ways to achieve amazing levitation photography quickly and easily



If you're not a magician, it may seem hard to shoot surreal levitating images. How can you levitate a model, an object, or an animal? Online, you can see photos of a woman suspended in midair, a candle floating without assistance, a couple carried only by balloons, someone soaring high above the cityscape. Sound surreal? You can accomplish levitation photography in a few easy steps. The Skylum team has researched levitating shots, and we're ready to share some of the photography techniques and winning floating poses with you. In fact, you can create this effect using Luminar, Photoshop, or even just your camera!



Luminar is a [photo enhancer](#) that can help you accomplish more by doing less. Safely store and organize your photos. Add incredible looks. Edit quickly and efficiently. Or even make someone float. Don't believe it? Download Luminar now for free and see for yourself.

Luminar 4 Your photography. Elevated.

Replace the sky in your photos, instantly! Boost details with AI Structure. Discover more amazing tools in the new Luminar 4.

- AI Sky Replacement
- AI Structure
- 60+ cutting edge features
- Instant Looks
- [And more](#)



Method #1 Jumping as a levitation trick

The easiest way to give the look of levitation is by jumping. Choose a complementary background and then ask your model to jump. There's not much magic to it. If you want your props to float, whether it's a book or a candle, the same principle applies. Make sure there's no one around when you're throwing the objects and that they aren't fragile enough to break when they hit the ground. The benefits of this levitation trick are that it's quick and easy and you don't have to do much during editing. But sadly, you can't plan the precise outcome. Moreover, your models may not be too happy about jumping all the time, especially because it could lead to injuries.

Method #2 Levitating with furniture

If you're not too fond of jumping, there's a way to accomplish levitating photography with the appropriate

furniture and some photography techniques. You'll need a stool, ladder, little table, or anything that you can balance your model on. Set your camera on a tripod. Take a photo of the model balancing on that piece of furniture. Ask them to stand, lie, or sit. Without changing the position and settings of the camera, take a second photo of only the background, without the model and the piece of furniture. Then you'll need to know [how to remove something from a picture](#). After you do this in Photoshop or Luminar, there will come the tricky part of combining the two images and making sure that the space previously occupied by the furniture looks natural. This way, you're "borrowing" parts from your background photo and applying them to the space where the furniture was. The result is an effortlessly levitating model!

Method #3 Levitating with props

This way suits professionals and those who can spend a little extra money on the setup. You can always arrange your levitation photo with cords, strings, or other props to make objects float in the air. This is a great idea if you want to balance multiple objects in midair around the model and you can attach them all with strings or cords to the ceiling or a tree. Make sure that your model feels comfortable suspended and don't let them stay like this for too long. This option allows you to only edit out the strings. The clothes and hair of your models will fall down naturally, creating a great levitation trick.



Levitation photography explained

Now that we've revealed the magic, let's take a closer look at some of the photography techniques used in [levitating photos](#).

Photography gear and model

The most important thing you need is a camera, a tripod, a willing model, and some suitable furniture. Other than that, you can also grab a fan (to create a floating effect for long-haired models), some light reflectors, and other props. Make sure that the model knows what they're getting themselves into: floating poses are not a walk in the park. They'll often have to balance in uncomfortable ways to create the illusion of levitation.



Other props

Don't overlook seemingly tiny details, like the model's outfit or the setting for the levitating scene. If you want to create a floating effect, don't choose extra tight clothes for your model. Choose something light that can float around or otherwise give the illusion of movement. Levitation photography works wonderfully with dresses and long scarves and with skirts and unbuttoned shirts. If you want to create a beautiful thematic scene, think about the space beforehand. What kinds of objects would best suit this scene? If the levitation occurs because of strong wind, how does it affect the other objects in the room? Maybe you need to open a door or a window, bend some small trees and bushes, or make sure that the room is in disarray. Even magic needs logic to look believable!

Weather

Try to schedule your shoot for a cloudy day. This is important because overly dark shadows from your objects will be hard to edit out in post-production. Always make sure that the shadows are realistic and don't give away your levitation magic. Sometimes photographers invite assistants to keep the model upright or hold some objects. In this case, also make sure to remove the shadows from beneath them when you're editing your photos.

Shooting angle

An important part of your photography technique is the shooting angle. The [shooting angle](#) can make a difference. Shooting from a low angle will create an illusion that the model is higher in the air. However, this also means that your prop may cover parts of the model's body. That's a very hard misstep to fix in post-production. Make sure that the prop remains in the background in relation to the model. Shooting from a higher angle will not create a levitation photograph, but rather a falling one. However, you can experiment with different shooting angles until you're satisfied with the result.



Levitation photography ideas

Now that you're ready, here are some great ideas for how to levitate your models and objects and boost your creativity in levitation photography.

Consider the pose

The model's pose is really important. Your levitation shots should be believable. The pose might change depending on the narrative. Someone using magic and defying gravity and someone being blown away by a gust of wind entail different photographic details. Sure, you can ask your model to sit in the lotus position, pretending that hard meditation did the trick. But make sure that the model looks like they're floating: someone standing casually or leaning against a wall might not be a good idea.



Levitation with objects

If you don't want to levitate people, objects will do just fine. You can suspend a bottle over a book, eggs over a pan, or a tea set in midair. But we advise you to choose small objects that can't break easily. For example, you can make paper cranes float and they'll create a stunning and surreal effect. Another photography technique is to suspend multiple objects using one string, creating a motion effect.

Balance two people

How can you levitate two people? The same principle applies, but when levitating two or more people, the stakes are higher. Think of beautiful floating poses beforehand. Balance everyone correctly and make sure that the shadows are on point. You can always make only one of the models float while the other is holding their hand and keeping them from flying away. The composition is your way to express your creativity, but your models should feel comfortable, know exactly what they're doing, and feel safe balancing on furniture or props. Moreover, floating poses should look believable in post-production, including the hair, outfits, shadows, and even facial expressions.

Create a story

Levitating photography is one of the most creative and artistic photography techniques. You can tell a whole story with one photograph and winning floating poses. By making your model levitate above a bed, you can convey the surrealness of dreams. By making a young man with a flower float above the ground, you can convey the feeling of love when you rush on a first date. Think of your personal levitation definition: something romantic and beautiful, or a scary and surreal experience. Then tell your story through photographs. There are endless possibilities for you to discover with this wonderful technique.

Use colors

You can enhance any photograph by using the right colors. Red for passion, blue for melancholy, black for gloom. Create a feeling that your model is lighter than a feather by dressing her in a white dress. Use a gloomy background and dark tones to create the illusion of sadness around your floating model. When you create a story through subtle details, you'll be able to add depth to your photographs.

Levitation in Photoshop

If you know [how to cut something out in Photoshop](#), you're already ahead of the game. In this quick tutorial, we'll let you know exactly how to make a levitating photo in Photoshop using layers.

1. Open two images in Photoshop: one with the empty background and the other with your floating subject.
2. Put both of them in the same file but in different layers. To do so, select the image with the model and copy it. This can be done through the Select menu by choosing All, then going to Edit > Copy to grab the image. Next, paste it on top of the background photo (the background photo will not be visible).
3. Add a layer mask. Go to the Layer menu and choose Layer Mask, then choose Reveal All. In the layers palette, you can see that a white box is shown next to the layer.
4. With the layer mask added, simply paint out the object used for levitation. Select the brush from the tools and make sure you're painting in black. Use a white layer mask with a black brush to paint the top layer out and see how the background shows through.
5. Add any corrections you wish to make the photo seem more natural.



The Clone & Stamp Tool

This tool replaces unwanted pixels with pixels that you target. First, set a sample point from an area with pixels you want to mimic, then paint into unwanted areas. The Clone & Stamp tool is often used to remove blemishes or dark spots from skin, but it can also accomplish levitating shots and other photos. After you're done, Luminar also offers feathered brushes that blend the strokes easily.

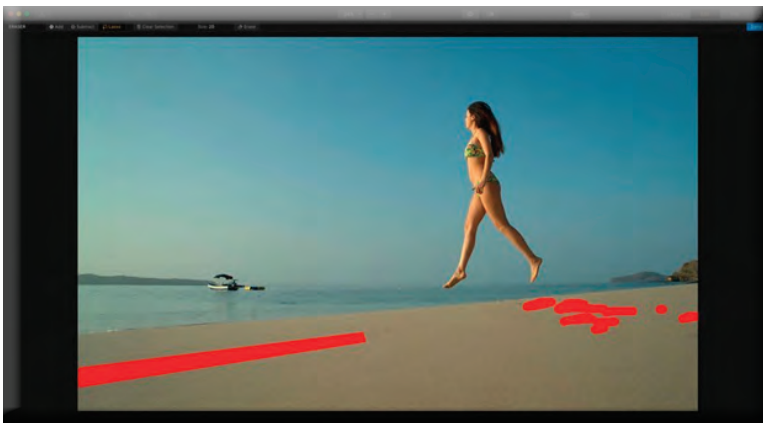
1. Open the picture that you want to turn into a levitation photo.
2. Select the Clone & Stamp tool in the top toolbar, or press Cmd+J.
3. When you find an area to Clone & Stamp, hold down the Option key and click on a clear area near the furniture.
4. Click and paint out the furniture you want to remove. Try blending multiple strokes together and lowering the opacity of the brush for the best results.
5. After each stroke, Luminar blends the image and updates the screen to show the new pixels. Continue to examine the results and make additional strokes as needed. Click Done when you're satisfied with the result.



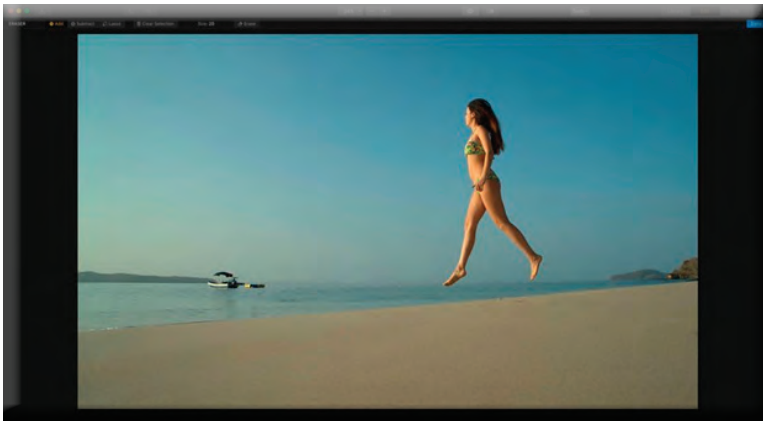
Using the Erase tool

Another photography editing technique is to use the Erase tool. There's no need to select the pixels you want to mimic with this tool. Simply click and paint over the unwanted areas – in this case, furniture, supporting strings, and shadows. Luminar analyzes the surrounding area and generates a new texture based on what is near the spot that you picked. The Erase tool also matches the texture, lighting, and shading of the original pixels. It's fast and easy to use.

1. Open your image with unwanted details. In this levitation shot, there are still some footprints in the sand.
2. Select the Erase tool by clicking the Tools menu in the top toolbar.



3. Simply click and brush over the unwanted area, in this case the footprints. If you have a large area to select, choose the Polygonal Lasso tool.
4. When you've made a basic selection, click on the first point to close the loop.



5. Click the Erase button to remove the selected areas.

We hope that this article was useful and that you learned how to levitate your models!

If you're interested in trying out the Clone & Stamp or the Erase tool for your levitation photography, click the button below and try Luminar right away. Take advantage of our free trial to see if Luminar suits your workflow.

Follow [Skylum Software](#) on YouTube // Get the latest videos, tips, and photography inspiration each week!

Understanding Shutter Speed

by Chris Gheen



As a photographer, one of the biggest components of nailing your shot is ensuring you have the correct shutter speed. This aspect of the exposure triangle is perhaps the most critical component of an image. Where ISO or aperture may influence the brightness or artistic nature of a photograph, a mistake when choosing a shutter speed can render an image completely useless. By managing shutter speed carefully, a photographer can create art, capture a fleeting moment, or simply depict a more accurate vision of the scene before them. There is a direct correlation between the sharpness of an image, and the shutter speed. To have an image with intentional blur (caused by a slower shutter speed), a photographer conveys motion. By speeding up the shutter, a photographer can capture an image that they may not even be capable of seeing with the naked eye. The opportunities for creativity are limitless, so let's take a look at how to utilize the shutter speed to make the most of your images.

The shutter is the part of the camera that blocks or prevents the camera sensor or film from being exposed to light and capturing an image. The majority of digital cameras will have either an electronic or mechanical shutter, and some may have both. When the shutter is closed, the camera is incapable of capturing an image, as the sensor will be completely blocked from all light and unable to produce an image. While the shutter is open, the camera's sensor (if shooting digital) will begin processing light on a photosensitive electronic processor, converting light rays into data points. These data points are what will eventually become your image.



When taking a photo, pressing your camera's shutter button will cause the shutter to open, and will expose the sensor to light for a set length of time. That time measurement is known as the shutter speed. The longer the sensor is exposed to light, the more light is picked up and the brighter an image becomes, ultimately leading to an all-white light scene as the processor is overwhelmed with data.

You can select certain settings where the camera will make the decision regarding an appropriate shutter speed. When shooting in "Manual" however, it is the photographer's job to adjust the shutter speed as lighting changes to ensure the data captured by the sensor is balanced enough to ensure a quality exposure. Shutter speed is displayed in camera typically as either a whole number or a fraction with 1 as the numerator (the number on top).

Examples of shutter speed indications on your camera would look like 250, 1000 or 1/30, 1/100. Once shutter speeds dip below about a half second, cameras will typically add a quotation mark to differentiate between full second and fraction of a second exposures, 2", 0.5" or 10".



There's a wide array of benefits that come from manipulating your shutter speed to produce an image. The longer your shutter is open (referred to as a slower shutter speed) results in brighter images, and the ability to convey motion through the use of blur. Opening the shutter for a shorter length of time (faster shutter speeds) results in less light hitting the sensor, but also allow the photographer to freeze motion in the image, and can result in a more crisp image if all other variables are equal. Wildlife photographers are often having to walk the line between fast shutter speeds and dark imagery due to the need to freeze a bird or animal in the frame. By shooting at higher shutter speeds, the photographer will need to utilize other aspects of the exposure triangle to brighten an image while compensating for the darkness caused by a fast shutter speed.

So you may be asking yourself, "Self, all this talk about varying light and shutter speeds sounds well and good, but what do I do with all that information?" Well, that's a great question. There's a ton of ways to manipulate light and motion within your frame by adjusting your shutter speed to produce a variety of image styles.



Slow Shutter Speeds

As a photographer, or even just as someone who appreciates photography, you may have seen photos like this one, depicting a blurred stream or water feature, while other parts of an image stay sharp. This effect is achieved by placing the camera on a tripod and reducing your shutter speed to at least $\frac{1}{8}$ of a second or slower. I typically shoot for $\frac{1}{2}$ second to 2 second exposures, based on how soft or blurry I want my water to be.

Faster shutter speeds will result in less blur, while longer shutter speeds can result in a softer, almost ghost-like appearance from the water. The resulting water blur has become iconic in shooting intimate nature scenes and depicting the natural movement of a waterfall in a single image. This is also a great tactic when shooting ocean scenes, to give a fog like effect along the shore from waves coming and going. To accomplish this, however, shutter speeds closer to 5-10 seconds may be necessary.

One of my favorite ways to play with long shutter speeds is with astrophotography. By switching your camera to "bulb" mode, you can use a remote shutter to keep your camera's shutter open as long as you'd like, well beyond the pre-programmed 30 second limit on most cameras.



High Shutter Speeds

Where a slow shutter speed can be used to create a more intimate, artistic scene, high shutter speeds can be utilized for freezing action in a way that may not be able to be seen without the use of a camera. Things like a bird diving into a river, a bison running from a predator, or a fish jumping out of the water can all be frozen in an often impressive manner that creates a bolder impact. Fast moving subjects need to be shot at very high shutter speeds to ensure a sharp, well frozen image.

When shooting birds of prey, I like to ramp up my shutter speed to over $1/2000$, and if the light affords me the luxury, sometimes as high as $1/4000$.



While most fast-moving animals don't need to be shot at 1/4000, birds of prey have extremely long wingspans, resulting in incredibly fast-moving feathers at the wing tips. Where smaller songbirds can often be shot at around 1/1000, the fast-moving outer feathers of a larger winged bird can often come out blurry even at shutter speeds as high as 1/1500. By shooting at 1/2500 or 1/3000, you can often ensure that each individual feather will be suspended in air in a crisp display of the raw power of the bird.

But what about all of the other times when you don't need to shoot at an incredibly high or low shutter speed? How do you decide what shutter speed to use then? My advice here is to first ask yourself a few questions... Are you shooting on a tripod? Is anything in the frame potentially moving? What is your focal length? These questions will help to make it very clear what a rough starting point may be for a shutter speed. If shooting on a tripod, there is limited potential for camera movement or shake, and thus, a lower shutter speed is just fine, allowing for lower ISO and a sharper aperture.

If you are not shooting on a tripod, you'll need to decide what's more important, between higher detail from a low ISO (and therefore lower shutter speed) and thus higher potential for camera shake/blur, and less shake from higher shutter speeds, combated by higher ISO or wider aperture. Typically, in order to keep your exposure the same, moving ISO up means moving shutter speed up.

Another concept to understand is that at certain focal lengths (zoom for the new folks) the camera shake from shooting handheld is exaggerated. The more zoomed in

you get, the more pronounced the camera shake can be, and thus blur your images when shooting hand held. To combat this, a good rule of thumb is what is known as the hand holding rule. When shooting hand held, try to keep your shutter speed higher than your focal length (as measured by the 35mm standard). For example, if shooting a full frame camera at 100mm, ensure your shutter speed is over 1/100. If shooting at 250mm, make sure your handheld shutter speed is at least 1/250. You get the idea. Take note that this is the full frame or 35mm sensor equivalent, so be sure to adjust for the crop factor of your camera. If your lens has a built in image stabilization (or vibration reduction for you Nikon folks) this guideline is not as important, but can still be helpful in ensuring the fact that you're shooting handheld isn't impacting your shot. The hand holding rule is useful in minimizing blur from camera shake, but will not have an effect on the blur caused by a moving subject.

The best thing you can do for your photography is be intentional. If a blur looks intentional it is seen as art. If a blurred subject looks unintentional, it's a bad photo. It's up to you, the photographer to use these tools to convey a subject that is intentionally blurred or intentionally sharp. But whatever your choice, make sure it's done in a way that shows you've thought carefully about your image and I'm sure you'll walk away happy with what you've got.

Now get out, practice modifying your shutter speed, and see what you can come up with! Happy shooting!

Chris Gheen

Chris grew up exploring the mountains of North Carolina, originally with his family on weekend camping trips and later as a self-taught rock climber and backpacker, leading him ultimately to a degree in Recreation Management from Appalachian State University with a focus in Outdoor Experiential Education. Immediately after graduating, Chris drove west, knowing the mountains and opportunities for adventure were much bigger. Since then, he has worked in a variety of guiding applications, from small leadership non-profits to adolescent wilderness therapy, to commercial hiking and tourism guiding in California, Arizona, Utah, Colorado, Wyoming, and Montana, always with a camera in hand. Chris loves teaching and sharing his passions and experience with others and is sure to provide careful insight and education whenever the opportunity arises. Chris currently resides in Bozeman, Montana where easy access to Yellowstone National Park allows him frequent trips into the park to photograph wildlife and the unique geologic features of the area. When not behind the lens, he spends his time backcountry skiing, ice climbing, and mountain biking, always on the lookout for a new unique perspective to photograph. The mountains have always been a point of inspiration for Chris and he is excited to capture the beauty of the natural world in an effort to share the space he is so privileged to work in with those around him.