Adobe Creative Cloud

Design Features Powered by Adobe Sensei

Adobe's design applications leverage the power of artificial intelligence and machine learning to give you tools that can help you take your designs to the next level.

Adobe's design tools offer you the power and control you need to realize your vision in graphic terms, whether your project is a document, a social media post, a web page, a video, a 3D rendering, or an illustration. These tools all leverage the power of Adobe Sensei's artificial intelligence and machine learning to do things you would find difficult or time-consuming, and give you results you can use as-is or adjust at your discretion.

InDesign

FIND SIMILAR FONTS

Choosing just the right font for your InDesign can be tricky business. It happens quite often that the font selected during the design phase of a project just doesn't quite have the effect intended when the work is laid out. If you're like most design professionals, you may have hundreds of fonts directly installed on your machine from every project you've ever done, plus many more activated in Adobe Fonts. How can you quickly find a similar font that'll function like the original choice but have a better impact?

Find Similar Fonts offers a quick and simple way to do this. Powered by Adobe Sensei, Find Similar Fonts filters your fonts list to just the ones visually similar to the font you've chosen as a basis for search. Selected in the Fonts menu (look for the ≈ symbol), Find Similar Fonts uses AI-driven analysis to discover fonts available to you (either on your own machine or activated in the cloud), in any font format (Adobe Fonts, TrueType,
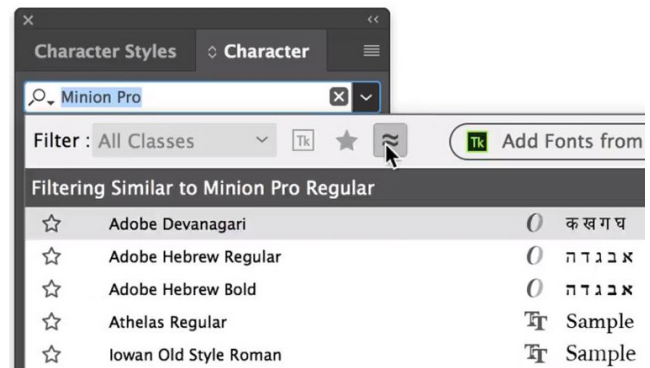
OpenType, Multiple Master, etc.), that look similar in style, weight, shape, and size, paring down the list of potential fonts to just the ones that will serve your purpose.

Learn more about Find Similar Fonts.

CONTENT-AWARE FIT

Images often don't neatly fit into the frames allotted to them in a given design. When that happens, what do you do? InDesign has long had different options for dealing with this: Fill Frame Proportionally, Fill Content Proportionally, Fit Content to Frame, Fit Frame to Content, and Center Content. All these options choose different techniques to adjust either the content (the image) or the frame it's in to make things fit. However, they all have drawbacks: content can be blown out of proportion, leave empty space in the frame, be misaligned so the subject is cropped out, or distorted.

Content-Aware Fit, powered by Adobe Sensei, takes an AI approach to fit an image to its frame automatically by using the same criteria you would: identifying the subject of the image, making sure that part of the image fits nicely in the frame, and then scaling and positioning the overall image so as to optimize the composition of the image in the frame. Content-Aware Fit uses artificial intelligence to analyze an image to identify its subject, and it's sophisticated enough to include negative space in the image to balance the composition. Now, with just a click, you can
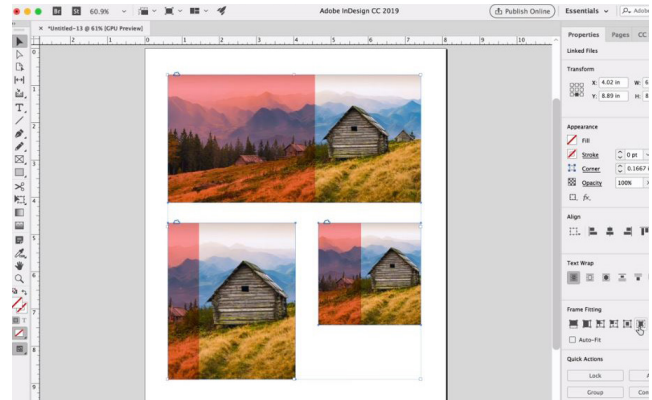
place images into frames in InDesign and have them automatically adjusted to show their best. This saves you all the time involved in scaling and positioning the image yourself.

[Learn more about the Content Aware FIt.](#)

[View this Adobe blog post for a video demonstration.](#)

Spark

AUTO CROP & ZOOM

Adobe Spark lets you create great social media posts from text, photos and video. But sometimes placing photos in a layout results in problems: the photo selected may not fit the proportions of the frame it's in, and in the process of placing it, the best part of the photo may be missed.
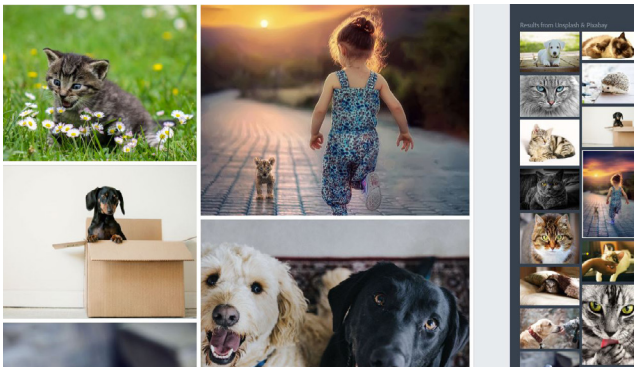
Auto Crop and Zoom, powered by Adobe Sensei, recognizes the subject of a photo and automatically crops and zooms photos to fit the layout of your page or social media post while preserving the best part of each image. And it does it adaptively as you add photos to your layout, resizing and recropping each as needed to adapt to the changes.

The result is a beautifully arranged photo layout that shows off each image at its best within the page or post you're creating. Very quickly and with little effort, you've got a collage worth sharing with friends.

[To see Auto Crop & Zoom in action, watch this Adobe video.](#)

AUTO RECOLOR

Adobe Spark offers you an easy and powerful way to control the colors in your Post or Page layouts: Auto Recolor. Powered by Adobe Sensei, Auto Recolor analyzes the content of your composition and identifies elements that go together—text, photos, graphic elements, and so on—and groups them intelligently. Auto Recolor then uses themes—groups of colors that complement one another—and maps the colors in the theme to the elements of your composition.

The result is quick, coordinated recoloring that automatically swaps in new colors thematically for grouped elements in your composition to give you a new look. You can experiment as much as you want with Spark's Color Picker to select different base colors from which Spark will create new themes, and
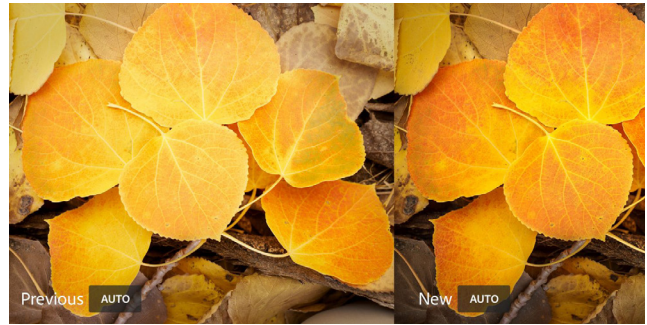

have Spark automatically apply different themes until you get the look you want.

To see Auto Recolor in action, watch this Adobe video.

AUTO RESIZE

Getting your story out there, whether you are sharing with friends or promoting a business, is important to connected digital media users, but posting to multiple social media platforms can be a challenge. How do you find the time to customize your post's layout for Facebook, Twitter, Instagram, Pinterest, YouTube, and every other social media channel? In Adobe Spark, Auto Resize powered by Adobe Sensei, takes care of that for you.

Auto Resize analyzes the design elements of any post and an aesthetically pleasing way to fit the size and proportions of any target: not only all the major social media channels, but different devices, and even print. With Auto Resize, you can create your post once, and then use this feature to automatically redo the layout to fit whichever target you want.
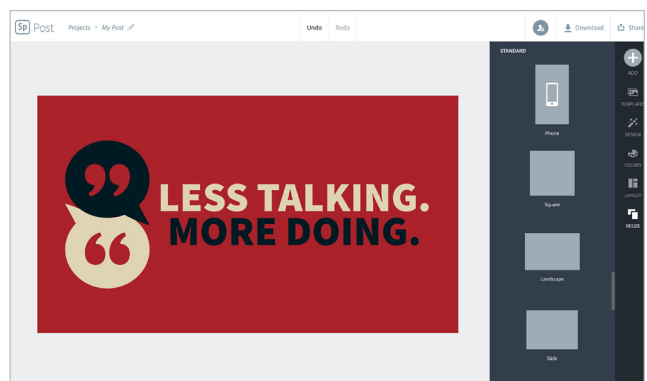

Read more about Auto Resize.

CONTENT-AWARE LAYOUT

Creating a collage from photos can be a time-consuming process of selecting appropriate images and arranging them artfully, cropping and sizing them as needed to fit your chosen layout. There are endless possibilities: how can you create something that shows off your chosen photos to their best advantage?

Content-Aware Layout, powered by Adobe Sensei, applies artificial intelligence and machine learning to address this problem at several levels. Given your choice of photos, Sensei-powered artificial intelligence analyzes the content of each one, identifies people and objects in it, and selects a subject and focal point to
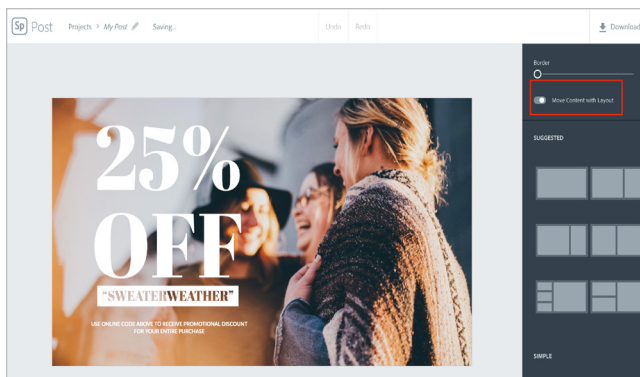
keep it within the frame of any layout and cropping combination. Next, Content-Aware Layout takes your selections and uses machine learning to compare them to its library of layout suggestions, scoring each one for its suitability to your content and then suggesting only the best for you to use. Finally, Content-Aware Layout can take your photos and synthesize a new layout that best features your content.

The result: Content-Aware Layout automatically positions, scales, and arranges your selected photos into a collage that shows them off best.

To see Content-Aware Layout in action, watch this Adobe video.

Dimension

MATCH IMAGE

One of the thorniest problems when producing photorealistic images is matching a model to its background. If you don't get the lighting and camera perspective right, it'll be obvious to anyone that you've digitally composed a model on a background scene, which is exactly what you don't want.

Match Image, powered by Adobe Sensei, uses artificial intelligence to analyze your background image and derive from it the lighting conditions and camera perspective that need to be applied to your model(s). It then automatically applies the correct lighting and perspective settings, making your model appear perfectly matched to the lighting of the background. Match Image also detects the presence of sunlight in the background and can apply matching effects to your model and apply an environment light that accounts for all the diffuse light in the background, as well. Finally, Match Image can actually resize your canvas to match the

image aspect ratio, so your model fits perfectly. All in one step, a whole set of difficult adjustments are perfect!

Learn more about Match Image.
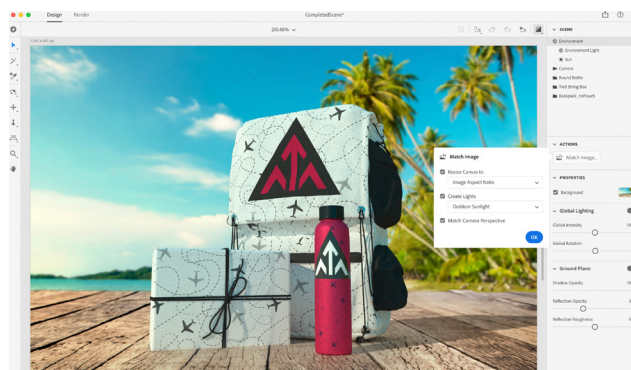
PLACE GRAPHIC

Producing product mockups and 3D presentations requires applying logos and often other graphics to your 3D models. But how can you map a 2D graphic to a 3D model? Place Graphic, powered by Adobe Sensei, does this for you.

When you're working with a model in Dimension, simply drag and drop an image (from Photoshop) or vector graphic (from Illustrator) onto your model, or double-click the part of the model where you'd like to put the image and select the Place
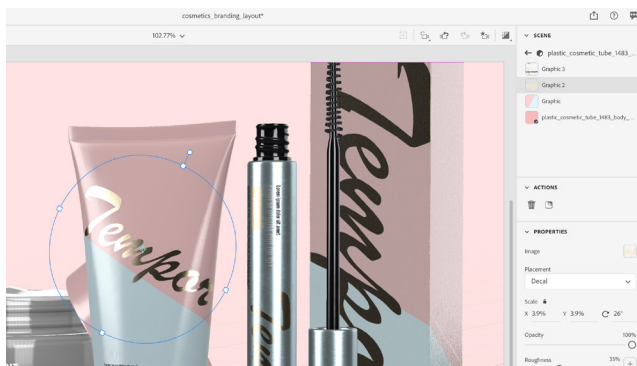
Graphic as Decal button. Using its built-in recognition of the shape, Place Graphic does the work of adjusting the graphic to match the shape, orientation, and perspective of the model's surface. Once you've placed the graphic, you can rotate it, scale it, or adjust its opacity; you can even add grayscale masks to it to adjust its texture. The result: your graphic appears to be directly printed on the model.

To see Place Graphic in action, watch this Adobe video.

REDUCE NOISE IN RENDERING

Rendering the final 2D image from your 3D scene in Dimension is the final output for your project. But rendering a scene in full fidelity takes time, and often you'd like to be able to get an accurate idea of the final rendering without having to wait so long. Adobe Dimension includes an option, active by default, to reduce noise in rendering; this significantly improves rendering time.

Taking advantage of Adobe Sensei technology, the Reduce Noise in Rendering option gives you a significantly improved rendering that shows you a much closer approximation to the final while cutting the time it takes to render.
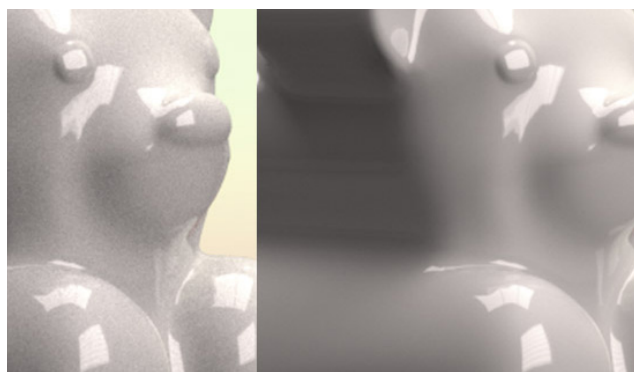
Learn more about Reduce Noise in Rendering.

MAGIC WAND
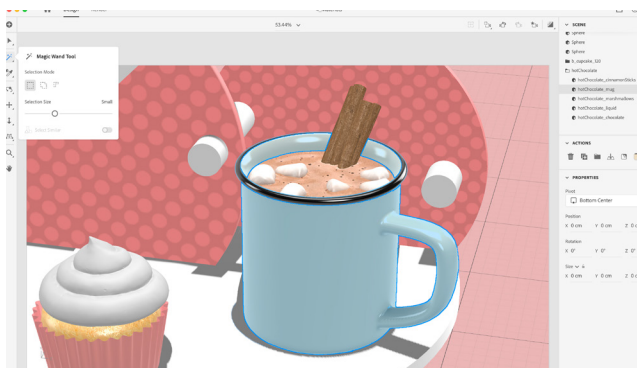
The Magic Wand tool in Adobe Dimension uses the artificial intelligence of Adobe Sensei to recognize the parts of a 3D model.

When you're working with models in your Dimension workspace, you often need to select not an entire 3D shape, but some part of it instead; for instance, just the lid of a box. The Magic Wand lets you do just that. With that part selected, you can perform any operation you want on just that part of the shape: apply a texture, adjust the shape, or even cut, copy, paste, or duplicate the part you've selected. This gives you control over your 3D models at the individual piece or part level: you can break up a model into pieces, apply different effects to each piece, and multiply pieces as you wish.

Learn more about the Magic Wand tool.

Illustrator

PUPPET WARP

Puppet Warp, powered by Adobe Sensei, applies machine learning to recognize the content of vector art and help you transform it without having to manipulate the anchor points of your shapes. The results of twisting and distortion appear natural.

Trained on thousands of vector images, Puppet Warp works by identifying pin locations—places in the artwork that can serve as a pivot for transformation. Adobe Sensei analyzes your artwork and automatically determines optimal locations for placing the pins; you can accept these locations, relocate the pins, and add or remove pins at your discretion. Then, to transform your artwork, you either click and drag each pin, or rotate the art around it to bend, twist, and otherwise distort the shape. As you do, Puppet Warp organically adjusts the rest of the shape in proportion to produce a natural effect.
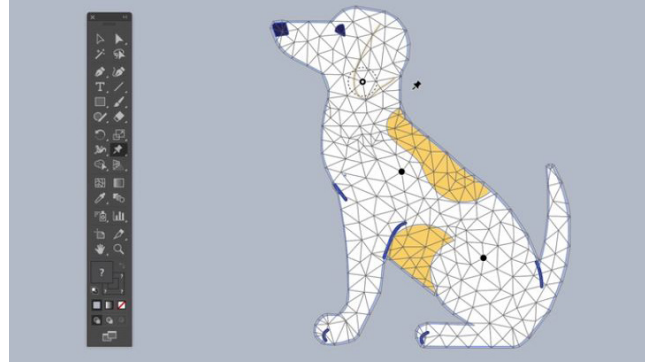
Puppet Warp takes the tedious and difficult task of producing natural-looking art variations and makes it easy.

Learn more about Puppet Warp.

GLOBAL EDITING

Creative work, especially in branding and advertising, often involves repeating visual elements many times. Logos, icons, and other elements may be reused throughout a piece, sometimes as-is, and other times transformed by a change in scale, rotation, line weight, color, or other qualities. When you discover you need to change something about an image's element, you're faced with the chore of modifying all the copies of it you've already made!

Enter Global Editing. Global Editing, powered by Adobe Sensei, analyzes the artwork and identifies all the similar shapes in it, even if you've tweaked them already. It effectively selects all the similar objects in your artwork, so when you edit one instance, those same edits are applied to all similar images at the same time. Not only does this save a lot of time, but it ensures you find and change all the instances of a repeated visual element, so you don't leave anything hanging. Global Editing also works on similar groups of image elements, the same way it works on individual


image elements. By enabling you to edit all the similar shapes in an image by only editing a single instance, Global Editing saves you tremendous amounts of time.

Learn more about Global Editing.

CURVATURE TOOL

This Sensei-powered alternative to the Pen tool uses machine learning to compute control points automatically for the anchor points you drop onto your artboard, creating smooth curves without the need to manipulate the control points to achieve quality results.

The anchor points created by the Curvature tool remain fully controllable by you; if you want to manipulate them, you can do so just the way you want. However, you'll appreciate the Curvature tool the first time you need to change a shape you've drawn, say, to remove an anchor point. Instead of having to manually adjust the neighboring points, you'll see Curvature create a smooth path between the remaining points without your needing to do any work.
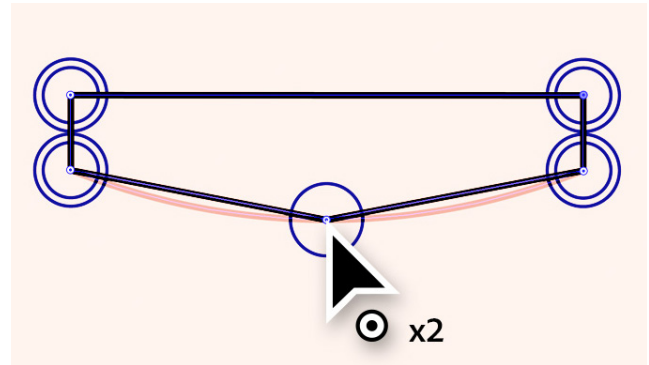
Learn more about the Curvature Tool.

FREEFORM GRADIENTS

Freeform Gradients, powered by Adobe Sensei, is a step beyond the limits of traditional gradient features. For a long time now, painting and drawing applications have offered the same types of gradients: linear (axial) and radial. These may work well enough for simple shapes, but if you're working with a more complex shape—a dragon, a corkscrew, or a tree, for instance—trying to fill these types of shapes with gradients can be tedious, complex, or

simply impossible in most applications on the market today. With Freeform Gradients, however, Adobe applies artificial intelligence to implement gradients on any shape.

Freeform Gradients works in either a point mode or a line mode. In point mode, you click within the shape to create points from which colors will radiate; Illustrator will then calculate the optimal gradient of colors between those points and throughout the shape. In line mode, you click a series of points to draw a path; this forms an axis along which your gradient fills the shape. You can use multiple paths within a single shape for combined gradients as well. Freeform Gradients can do this because it analyzes your shape and develops a mathematical mesh model for it that allows Freeform Gradients to plot the exact color it needs to apply at every point. The result is a beautiful, organic gradient fill over which you have complete control.

Learn more about Freeform Gradients.

CONTENT-AWARE CROP

Content-Aware Crop, powered by Adobe Sensei, instantly offers you a recommended crop that preserves the best part of your image.

With Content-Aware Crop, you can crop images quickly, reducing or eliminating the process of manually setting and adjusting a cropping parameter. Content-Aware Crop uses machine learning to recognize the objects in your image and score them on visual significance. Using these scores, it then calculates a number of possible cropping rectangles and checks how each one scores on its ability to keep the significant parts of your image while cutting out the rest. The best-scoring cropping rectangle is then automatically selected and shown to you as soon as you select the cropping tool. This all happens without requiring any input: you can accept the recommended crop or adjust it as you like. This not
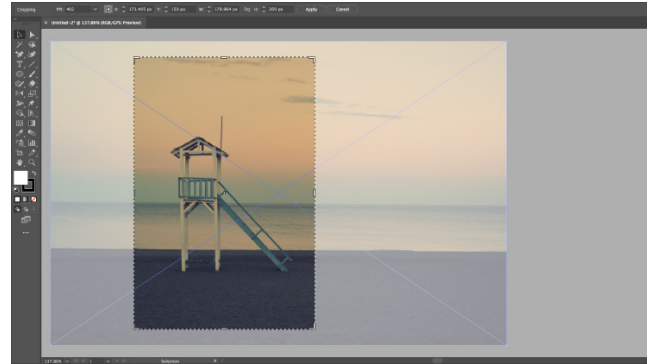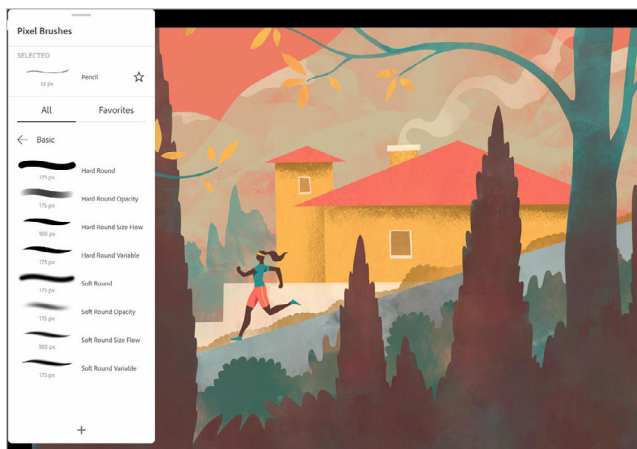

only helps you optimize the visual quality of your image but can help automate your workflow on multiple images.

Learn more about Content-Aware Crop.

Fresco

LIVE BRUSHES

Adobe Fresco is a new painting and drawing application designed for artists who draw and paint professionally or for passion. Central to Adobe Fresco are its Live Brushes.

Powered by Adobe Sensei, Fresco's Live Brushes simulate watercolor and oil paints, and the effect of painting on real surfaces, to deliver an unparalleled drawing experience. Dynamic simulation algorithms mimic the look of the brushstrokes and the way the pigment behaves when wet. Watercolors spread on the paper and blend with adjacent colors before they dry; colors can be diluted with water; and the drawing surface can be washed with a clean wet brush to diffuse previously applied colors. Painting with oils leaves brushstroke ridges in the paint; colors can be mixed right on the canvas; and paint can be picked up with the brush and spread or the brush can be cleaned and reloaded with color to apply elsewhere.

Both watercolors and oils have several different brush types and multiple settings to enable control over the size and flow of every stroke. The result is unlimited expression.

Read and see more about Live Brushes.

Conclusion

Giving you greater power and control: that's what the Adobe Sensei-powered features of Adobe's design applications are all about. You can discover which font suits your composition the best; automatically crop, zoom, and reposition photos to fit the frame; find the best layout for your photo choices; adjust colors automatically; intelligently select individual parts of a 3D model; match your model to your background; wrap graphics around shapes; and get your rendering faster with better quality. All these functions empower you to realize your creative vision. These tools help you to realize your creative vision while freeing you from the more time-consuming, difficult, or impractical aspects of the work.