

Digital Photo Editing 101

by Bert Schopf

So, you bought a digital camera and now have dozens of not-so-terrific pictures that just need a little tweaking to make them look great. But, the image editing software that came in the box is so complicated and not in the least intuitive. What you need is Digital Photo Editing 101. We give you the low down on different types of digital images, the basic features of image editors and management tools that you can put to work to create the masterpieces hidden inside your pictures.

What is a Digital Image Anyway?

- Made up of a plane of many tiny picture elements called pixels
- Pixels form a raster image in a rectangular shape; pixel density is measured as Resolution (dots per inch)
- Typical resolutions: Web images = 72dpi, Office = 150dpi, Print = 300dpi
- Easy to shrink an image; not so good-looking when enlarged though!

Colour Models

- Bitmap or Line Art = black and white are the only pixel colours = fax grade
- Greyscale = 256 shades of grey (from white to black) 8-bit
- RGB = **R**ed **G**reen **B**lue default for most digital images, light model (24-bit)
- CMYK = **C**yan **M**agenta **Y**ellow and **blacK** used in process colour printing
- Pantone = spot colour inks for commercial printing; consistent!

Image Formats

- .JPG = most common, compressed in variable qualities, web
- .TIF = often used in print, lossless compression
- .GIF = older internet format, supports transparency and repetition
- .PNG = compressed portable internet graphic format
- .PSD = Photoshop native format (other programs also have proprietary)

Popular Image Editing Applications

- Adobe **Photoshop** (industrial strength) \$\$\$ / **Photoshop Elements** (light vers.) \$
- Corel **PaintShop Pro** (great local company) \$
- Google **Picassa** (easy red eye removal) free!
- **Photoscape** (no layers or masking, but great cloning/blemish tools) free!
- **FotoSketcher** (just filters) free!

Image Editing Functions to Look for and Use

- Pixel painting tools = look for tool flexibility
- Exposure level, lighting and hue tools = filter or tools
- Import formats = open all? Rasterize vector formats?
- Export formats = varied, see above
- Colour mode = should be changeable
- Image resizing = smart resampling
- Layer and masking support = for more complex edits and art
- Cloning and blemish removal = should be flexible
- Filters = many cool or useful; some selection-enabled
- Type = supported and to what extent typographically?
- Selection tools = marquee, magic wand, by colour, lasso
- Crop tool = customizable?

Common Digital Image Problems

- Colour cast
- Too dark or light; no dynamic range
- Unwanted elements (to be eliminated)
- Needs cropping or rotation
- Requires resampling for web
- Red eye

Considerations for 2016

With the proliferation of tablets and larger-screen phones, more apps will appear on phones for many quick-edits. They will get your pics in uploadable shape fast!