Street Photography • GIMP Add-ons • Chromatic Aberrations • Image Databases

inside CE Digital Photography

The in-depth quarterly for the photo enthusiast

Creative Corner

Free DVD

Scanner Close-ups Cheaper than a macro lens!

Street Photography

Up close and personal

Free DVD

Six Video Tutorials Sample Images Full Version Software

Extensive Tests

Invisible Watermarks Discrete image identification

High-end Camera Test Nikon D800 vs. Canon 5D Mark III plus Olympus OM-D, Nikon D4, Pentax K-01

Better Photos

Photoshop CS6 New features, Our favorites

Add-ons RAW development with plug-ins and scripts

Eliminate Color Smears Tools for removing chromatic aberrations

Organize Your Photos

Sorting, Keywording, Geotagging, Face Recognition with Database Software Test: Aperture, Lightroom, Picasa, Cumulus, digiKam and more



(2012) • **\$14.99**

Fall Issue

SOUTH AFRICA

JOIN AFAR'S FOUNDERS AND EDITORS IN JOHANNESBURG THIS OCTOBER 8-11 FOR A ONCE-IN-A-LIFETIME EXPERIENCE.

MOTIO

afarexperiences.com



ENJOY EXCLUSIVE ACCESS TO THE APARTHEID MUSEUM

EXPLORE THE CRADLE OF HUMANKIND WITH SOUTH AFRICA'S LEADING PALEOANTHROPOLOGIST

CELEBRATE WITH LOCALS AT AN AUTHENTIC BUSH PARTY, WITH MUSIC, BONFIRES, AND A TRADITIONAL BRAAI BARBECUE

TAKE AN INSIDER'S TOUR OF "ARTS ON MAIN," JOHANNESBURG'S REVITALIZED CULTURAL HUB

ENGAGE WITH INFLUENTIAL SOUTH AFRICANS AT HOME DINNERS

MEET SOUTH AFRICA'S BRIGHTEST CREATIVE MINDS AND COMMUNITY LEADERS

CONNECT WITH YOUR FELLOW TRAVELERS AND OUR HOSTS AT A SPECTACULAR ROOFTOP PARTY

PLUS MUCH MORE







Our cover model was slightly puzzled when she saw the custom filmstrips that our styling team had created for this issue's shoot. They symbolize our title story on image database software, and we turned them into a spectacluar piece of headwear for the occasion. In the article itself, our test team gives you the low-down on Aperture, Lightroom, Picasa and others, and fills you in on some of the surprises they experienced when using them to organize complex collections of images.

Have you ever spotted a street scene that you just have to capture, but you are not sure whether you will be allowed to publish the results? Where does street photography end and portrait photography begin? This issue's workshop will get your documentary juices running and gives you important shooting tips and a series of step-by-step guided shoots to help you hone your technique.

There is an enormous range of free and commercial image processing products available on today's market, and it can be tricky to decide which to use. Some programs are indispensible, while others are better off in the trash. This issue's chromatic aberration workshop tells you all about how these bothersome artifacts are caused and tests the best programs for removing them seamlessly and professionally.

As always, open source fans get their money's worth too, and we show you how to use free add-ons to extend GIMP's capabilities and turn it into a full-blooded RAW converter and processor.

Have fun with this issue of your favorite photo magazine. If you want to meet us in person, we will be at Photokina in Cologne, Germany (September 18-23, Hall 04.1, Booth G038) and at PhotoPlus in New York (October 24-27, Booth 4). See you there!

Dirgen Ant

Juergen Rink





Portfolio

Jason Lee takes photos of his kids that are different than other people's – his daughters get up to things that are normally strictly off limits and the results are guaranteed to get you smiling

10 Jason Lee Portfolio

High-end Camera Test

We put Canon's new 5D Mark III and Nikon's spectacular D800 through their paces, along with the Nikon D4, the Olympus OM-D EM-5, the Pentax K-01, the Sigma SD1 Merrill and Sony's SLT-A57

- 18 Test Background and Details
- 25 Individual Results

Light Field Photography

The Lytro is the world's first consumer light field camera. This astonishing device lets you choose where you want to place focus after an image has been captured.

34 All About the Lytro and Light Field Photography

Street Photography

The charm of street photography lies in its closeness to everyday life. We take you through the history of the genre and provide tips and expert workshops to help you improve your own technique.

- 40 Street Photography Know-how
- 54 Shooting Tips and Workshops

Location Workshop

The job was to photograph a semi-acoustic guitar in a 'blues'-style setting. In this article, the author tells us how he pulled off this apparently simple but challenging brief.

60 Guitar Location Shoot

Eliminate Chromatic Aberrations

Imperfections in optical systems cause color errors in the photos they capture. We test a range of dedicated tools and plug-ins that are specially designed to correct these types of errors and artifacts.

- 66 Chromatic Aberration Overview
- 72 Lens Errors
- 76 Software Tool Test

Invisible Watermarks

Invisible watermarks give us a discrete way to prove ownership of digital material. Not many of the tools on today's market are really up to the job, and we test the best of the bunch.

- 84 Protecting Your Images with Invisible Watermarks
- **90** Software Tool Test

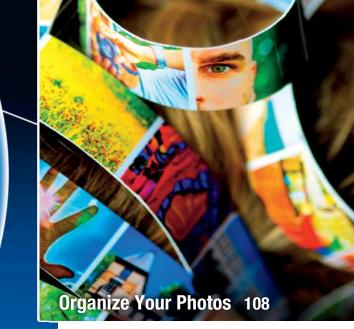
Photoshop CS6

The latest Photoshop release has been given a facelift and is packed full of new tools and functions. We fill you in on the details and list our 'top six' favorite new features.

96 What's New in Photoshop CS6







Eliminate Color Smears 66

GIMP Add-ons

Using plug-ins and custom scripts turns GIMP into a complete digital darkroom. We take you through some of the thousands of GIMP add-ons available now.

102 RAW Development with GIMP Add-ons

Organizing Your Photos

Image database software helps you perform searches, geotag your photos and recognize faces within large image collections. We take a close look at eight very different image management tools.

- 108 Image Database Basics
- 114 Choosing the Right Software
- 118 All About Metadata
- 123 Software Test

Scanner Close-ups

We show you how to take spectacular macro photos using a cheap desktop scanner instead of an expensive camera. The results are often quite breathtaking.

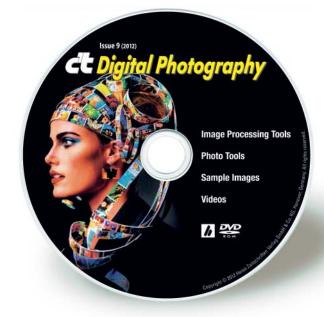
134 How to Shoot Macro Photos without a Camera

About Us

- 3 Editorial
- 6 Reader Forum
- 138 Coming Up in Issue 10
- 138 Contact Info

Free DVD

- 8 Highlights
- 9 Contents



DVD Download

An image of the free DVD provided with the magazine is available for download at www.ct-digiphoto.com/dvd092012

Readers' Letters

Keep Up the Good Work

Unlike many of the other printed media, your publication leaves no stone unturned and all information is supported with technical facts and dedicates as many pages as necessary to fulfilling the assignment. Complemented by the lack of pages of useless advertising, it is more of a manual/technical journal. Since discovering *c't Digital Photography* I do not buy any other photography publication. The information will be valid for many years and should form reference material for any serious amateur or professional photographer. Keep up the good work!

Glen Ward



have discovered that using these lenses on a modern DSL camera evokes strong memories of my father. Not only is the article informative and evocative, but Stefan Arand is also an excellent wordsmith.

Elliot B. Siegel

c't Digital Photography is available digitally in iPad and zinio formats, and the zinio reader is available for various platforms, including Android. Check out our website at www.ct-digiphoto.com/subscription for more details.

Disappointing Issue

We have just received issue 8 here and I must say I'm disappointed. You seem to be going the same as other magazines, with the inclusion of how you do everything Photoshop. I do not use that product and if I did there are so many mags that cover it I would buy one of them. Please stay with the way the first issues were, they were great.

Robert Broadhead



Manual Lens Adapters

Issue 4 (2011) of *c't Digital Photography* had an excellent article by Stefan Arand concerning manual lens adapters. I have three lenses, circa 1953, which my father used on his Exacta camera. These are: a 135mm f/2.8 Steinheil (Munich), a P. Angenieux (Paris) F35 1:2.5 and a Xenon 50mm f/1.9. It took me almost a year to find an Exacta internal mount lens for my Four Thirds Olympus E3. The photograph here was taken using the adapter and shows the 185-year-old Fort Snelling (on the Mississippi River) and an Alaskan Husky. I appreciate the article and

Comparable with the Very Best

Spring Issue is superb. Comparable in all respects with the very best, if not better than many of the very top drawer photomags. I particularly appreciated the cover – a breakaway from some in the past when some were downright hoakie, and the first to present an image of a mirrorless digital in a way that makes it worthy of adult consideration.

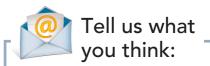
Nathan Caplan

Tremendous Value

When I first read the magazine two quarters ago I was astounded by how every article was about something I was interested in. I would say most magazines provide 30% relevant content, but practically every page of your magazine has articles that I am deeply interested in and caters well to both an amateur and professional audience. Combined with the provided software, I think your magazine presents tremendous value. I'm so glad I've found such a great read. The back issues were exactly what I was looking for. Please keep up the great work! Is there any possibility of Android and/or PDF versions?

Balraj Jassal

We are sorry to hear that Issue 8 didn't fulfill your expectations, even though it included articles on the open source Gallery software package and a range of non-Adobe slideshow and color management software products. It is an important part of our philosophy to cover a wide range of manufacturers and products. Our article on GIMP plug-ins in this issue continues the trend, and there's plenty more open source goodness in the pipeline – we hope you find something you like in the mix. Thanks for your comments and keep reading!



We are always happy to receive your comments and suggestions in a letter, an e-mail to editor@ct-digiphoto.com or at www.facebook.com/ct-digiphoto. We reserve the right to abbreviate your input for publication. Our comments are printed in italics.

Tove your photography skills !

Learn photography online with more than 400 films:



Photo Courses in Video Format

➡ Techniques explained by professional photographers



Tutorials in Digital Image Editing

➡ Master Photoshop



Interviews with World Famous Photographers

→ Understand photography



- Preview every film
- Watch 15 films
- Download our podcasts



DVD Highlights

Highlights of this issue's free DVD include an exclusive set of Adobe CS6 video tutorials, sample and test images from the articles and tests in the magazine and a free full version of the *Inpaint 3* photo restoration software. Our free software selection also includes many of the GIMP add-ons described in the article on page 102.



Using Flash Creatively

Video tutorials: In this series of FotoTV video tutorials, we show you how to use accessory flash to produce backgrounds for location portraits and give you the low-down on Photoshop Actions and file formats.

Portrait photos are all about people, and the background should only play a secondary role. It is simple to select an appropriate background in a studio environment, but things get more tricky on location, where you often have no choice in the matter. Dirk Waechter shows you how to use bounce flash, wide apertures and color filters to produce defocused backgrounds that remain unobtrusive and keep the viewer's attention pinned to the subject.

Following on from the 'backgrounds' tutorial, Kate Breuer uses two separate videos to explain how to use Photoshop Actions to automate processing steps that you use regularly. She uses the insertion of watermarks as an example to demonstrate how much time you can saves using Actions, and goes on to explain how to use complex Actions to perform color shifts.

In the final section of this series of FotoTV tutorials, Karsten Franke introduces the various file formats used by Photoshop. He discusses the attributes of standard image file formats such as TIFF, PSD and JPG, as well as more specialized EPS and PDF printing formats. He also provides a short introduction to vector and Web formats. (tho)



Inpaint 3

Full version software: Tiny details can ruin an otherwise successful photo. Inpaint enables you to remove unwanted objects, scratches and text using just a few simple clicks.

Many photos would be a lot better if it wasn't for that pesky trash can, street lamp, power line or tourist that got in the way! Inpaint offers a quick, easy solution that invisibly blends erased areas with their surroundings using intelligently generated textures pulled from the surrounding image data. The program makes fiddling around with clone tools a thing of the past.

All you have to do is mark the area you want to get rid of using a brush or a magic wand like the one found in Photoshop. The software reinterpolates the image without the unwanted object and uses pixels from the surrounding areas to create new image areas in the resulting 'hole'. The results are astonishingly good, especially in images with evenly colored backgrounds – for example, a beach scene can be easily relieved of an unwanted umbrella. The program only begins to reach its limits when removing large objects or multiple details.

To use the software's full functionality, you have to register your copy from within the user interface. You will then receive an e-mail newsletter and a special offer giving you a 25 percent discount on version 4 of the program. (tho)



Adobe CS6 Video Workshops

Video workshop: These videos show you how to make successful selections and create masks, give you tips on cleaning up your images and explain how to integrate Adobe Bridge into your everyday digital photo workflow.

n this workshop, video2brain trainer Tim Grey dedicates more than two hours to three specific areas of image management and processing using Adobe's Creative Suite 6.

Image processing in Photoshop often requires you to make precision selections before you can begin to make adjustments to selected image areas. The first part of this three-part workshop is dedicated to selections and layer masks. Grey shows you how flexible the Color Range tool can be when making selections and how to make quick selections using the individual color channels.

The second part of this series goes into detail on the tools you can use to correct various image errors. In addition to specific tasks, such as removing unwanted artifacts or brightening teeth in a portrait, Tim Grey also shows you how to combine tools and how to reduce the effects of chromatic aberrations.

The final section introduces image management and simple editing using Adobe Bridge, covering important topics such as keywording, image optimization and file export.

The full versions of all these videos are available for purchase at www.video2brain.com for US\$34.99 each. (tho)



DVD Contents

Image Processing Tools

Windows

ChromAcute Chromagic 1.1 Fix-CA 3.0.2 Fotomatic 1.4 GIMP 2.6.11 GIMP 2.8.0 GIMP Portable 2.6.11 GIMP Portable 2.8.0 GREYC's Magic Image Converter (G'MIC) 1.5.1.6 Harry's Filters 4.0 Inpaint 3.0 full version Liquid Rescale 0.7.1 Liquid Rescale Portable 0.7.1 Normalmap 1.2.3 Photivo Photobie 7.2.10 Photomatix Pro 4.2.3 RawTherapee 3.0.1

Mac OS

ChromAcute 1.1 GIMP 2.6.11 GIMP 2.8.0 GREYC's Magic Image Converter (G'MIC) 1.5.1.6 for Lion GREYC's Magic Image Converter (G'MIC) 1.5.1.6 for Snow Leopard Photivo Photomatix Pro 4.2.3 RawTherapee 3.0.0

Linux

GREYC's Magic Image Converter (G'MIC) 1.5.1.6 RawTherapee 2.4.1

Plug-ins:

Photoshop: SmartCurve 2.2 The Works 3.2 Wire Worm 6.1 GIMP: Contrast Fix EvenTone Photo Effects The El Samuko Collection 0.22 PSPI 1.0.5 PSPI 1.0.7 Separate+ 0.5.8 UFRaw 0.18 Wavelet Decompose 0.1.2 Wavelet Denoise 0.3.1

Photo Tools

Windows

Exifer 2.1.5 ExifTool 8.97 Plug-In Switch 1.3 TSR Watermark Image Software 2.1.5.1 waterMark 1.9.8

Mac OS

ExifTool 8.97

Linux ExifTool 8.97

Sample Images

Camera Test Sample Images Image Database Software Test Images Invisible Watermarks Sample Images

Videos

Background Effects Using Flash Creative Suite 6 Video Workshops Photoshop File Formats Photoshop Actions I Photoshop Actions II Lytro Light Field Camera Introductory Video

Portfolio Jason Lee

Children often come up with really creative ideas, so when Dad is a professional photographer who can turn those ideas into images, the results are guaranteed to get everyone smiling.





Sticking baby sister to the wall with gaffer tape. What makes this image surreal is that the girl on the wall seems quite happy about the situation and her big sister appears to have had no trouble getting her up there in the first place. These subtle impossibilities give the image its own special charm.

> Kayla removes her sister's tooth with a pair of pliers, while Kristin throws a pie in her sister's face or sticks her to the wall with gaffer tape – and the strange thing is, the girls seem to be enjoying every moment of these parental nightmares!

> The creator of these offbeat images is Kayla and Kristin's father, professional wedding photographer Jason Lee. He began taking

unusual photos of his daughters in 2006 when his mother became ill and wasn't able to see her grandchildren for fear of catching the infections that kids often carry.

Like others of their age, Jason's lively girls come up with crazy ideas but, instead of ignoring them, he simply decided to shift them up a gear and capture the results with his camera. The resulting images show his kids



Simple everyday events suddenly become unpredictable when a creative photographer gets to capture them his own way. This is what happens when a child sneezes a little more forcefully than usual.

doing things that are either forbidden or impossible, or both. In contrast to the antics of some fairy-tale rascals like Max & Moritz, these girls seem to be enjoying every second of rough and tumble rather than getting told off for their troubles. It seems completely natural to plant your sister and water her to make her grow! The combination of innocent child's play and bizarre scenarios is what makes these images special.

Jason leaves nothing to chance in his compositions and he carefully sets up the lighting and props in each scene before beginning a shoot. This way, the girls only have to stay still for a maximum of two minutes. Of course, they are rewarded for their efforts and having Dad play the fool behind the camera helps to get them laughing when the shutter clicks.

Most of the photos shown here were taken using Canon EOS 5D and 5D Mark II cameras and a range of Canon lenses (although Jason has now switched to using a Nikon D700). He used a Canon Speedlite 580 EX flash equipped with a PocketWizard remote transceiver, Photogenic 640 w/s strobes and a range of reflectors and softboxes for lighting. *Photoshop* and *Lightroom* are his tools of choice for post-processing.

When we asked Jason how he manages to make his photos so different from other people's, he told us that he likes to think outside the box and develop his own ideas while still listening to feedback from others. He also says that it is essential to write his ideas down as they occur. His unique approach and his obvious love for his kids is the basic recipe that makes these images so wonderful. (jr)

Links

www.flickr.com/photos/jwlphotography www.jwlphotography.com http://kristinandkayla.blogspot.com



This ought to be a painful experience, but in Jason Lee's world, removing a milk tooth with a pair of pliers seems to be a lot of fun



A baby sister has to be watered if she is to grow. Some of these photos have a highly cartoon-like quality.