



PATACS Posts

Editor's Notes

by Geof Goodrum

Co-Editor, *PATACS Posts*, editor@patacs.org

As Co-Editor Kathy Perrin noted in the January 2021 issue, PATACS is introducing several changes to this newsletter in 2021, which are outlined below.



- The publication schedule is eight issues per year.
- The newsletter is not tied to the PATACS meeting schedule. Please refer to the PATACS web site and email announcements for specific meeting information.
- This issue is the first using a word processor template created by John Krout, which will improve the consistency between editors and make the job easier to encourage new volunteer editors. Our volunteer proofreaders can also markup changes directly in the drafts.
- The default body text size is increased from 12 to 14 point to improve readability of the print edition.
- The editors will use a web application to shorten long web addresses in articles to make them easier to copy from the print edition.
- Single articles will be limited to no more than four text pages. Longer articles will be split across issues.
- The editors are considering a suggestion to change from two column to single column layout.

Please email comments on these changes or other aspects of the newsletter to editor@patacs.org.

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QR Codes and More

Barcodes containing useful info now show up in videos and presentations. Learn how to use those barcodes.

by John Krout

Potomac Area Technology and Computer Society (PATACS)

A Quick Response (QR) code is a square 2-dimensional barcode that provides useful info such as a web page address (Uniform Resource Locator or URL). QR codes can also contain email addresses, contact info, and just about any text. It is not the only square barcode out there. QR codes can be recognized by the square target blocks in the top two and bottom left corners.



Figure 1: [pexels.com/video](https://www.pexels.com/video)

Figure 1 shows a QR code example. This particular QR code provides a web page address for a site where short user-created videos can be downloaded for free. You have probably seen square QR code barcodes many other times in recent years.

My own presentations for PATACS frequently include web page addresses. In this pandemic era of virtual meetings, I have decided to include not only the actual URL but also the QR code containing the URL.

Anyone in the audience who wants to copy the URL from the presentation immediately can do so simply by using their smartphone. Chances are that you won't even need to install a barcode reader app on your phone. In recent iPhones and Android 10 phones, the camera app has been augmented to act as a QR code reader.

I tried my Samsung Galaxy S10 camera app. I pointed it at the computer screen where a QR code was visible in one corner of a presentation. The camera app immediately displayed the web page URL contained in the QR code, as you can see in Figure 2. I did not even have to snap a photo of the QR code. The app gave me the option of tapping the address to open that web page. Opening the web page is ideal for quickly saving the URL for later bookmarking.

Many retailers post QR codes enabling you to learn more about products.

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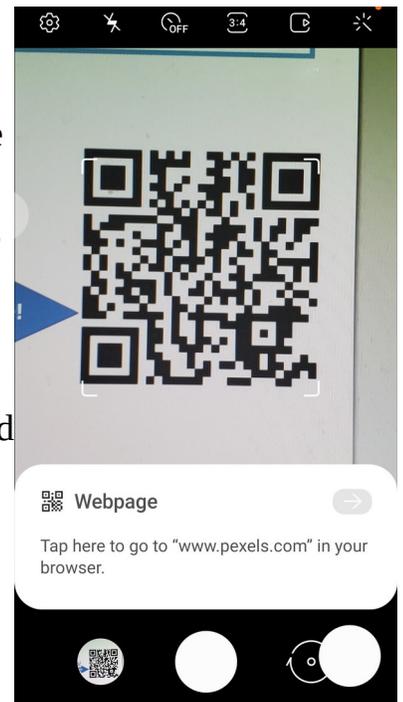


Figure 2: Android 10 camera app reading

Munzees

There is an outdoor game based on QR codes printed on small stickers posted outdoors. The name of the game is Munzees. I have not tried the game, though I know a few of my geocaching friends also play Munzees, and occasionally I see the small Munzees QR code stickers outdoors. Any small QR code in a place where it does not seem to identify any product or other specific object is quite possibly a Munzees QR code.

The Munzees game has its own web site, www.playmunzee.com, and its own free phone app for communicating found Munzee QR codes to the the web site. That URL is encoded in Figure 3.



Figure 3: Play Munzee URL

Creating QR Codes

I found that my Galaxy 10 Contacts app will generate a QR code for any record in my Contacts list. When I create a contact QR code, it appears on the phone screen. At that point I

can save the QR code as a graphics image file, or attach it to email or a text message.

There is a web site, <https://www.qrcode-monkey.com/>, which creates QR codes containing info you provide. It provides some interesting features, such as multi-color QR codes and placement of a recognizable logo in a QR code. You can download, save, print and share any QR code you generate on that site. The site provides this service for free. That URL is encoded in Figure 4.



Figure 4: QR code monkey URL

Other Types of Barcodes

There are several types of barcodes in wide use.

The Uniform Product Code (UPC) barcode on products, which enables rapid checkout and helps the retailer manage inventory, encodes information in several parallel vertical bars. That is an example of a 1-dimensional (1D) barcode. There are phone apps designed to scan UPC codes and tell you if the same product can be found for a lower price elsewhere.

Continued on the next page

If you have a Virginia driver's license, it contains both a 1D barcode and a 2-dimensional (2D) barcode. That 2D barcode is a type called PDF-417, and it includes all the text info on your license as well as some other info identifying your license record in the Virginia computer system. The American Association of Motor Vehicle Administrators (AAMVA) created a standard for contents of the driver's license 2D barcode, and updates the standard every few years. That standard is available online as a PDF document. You can read the field definitions in section D.12.5 of the PDF posted at the following URL, which is encoded in Figure 5.

<https://www.aamva.org/aamva2020dlidcarddesignstandard/>



Figure 5: AAMVA card standard

The 2D barcode on the driver's license is now scanned by Safeway at checkout if you buy alcohol. That means the Safeway computer system may capture a great deal of info other than your date of birth. Does the company save all that additional info about you? Doing so

centrally would use up a gigantic amount of storage space. Possibly the stores store the info locally, on a store server. That localized info could be valuable if a company store is audited by Virginia Alcoholic Beverage Control Authority (ABC) for underage sales.

Barcodes also typically show up on shipment box labels.

United Parcel Service (UPS) uses a 1D barcode type for machine-readable package tracking numbers. If you have received UPS parcels in person, you have probably seen the UPS driver use a barcode scanner to scan the tracking number barcode and confirm date and time of delivery of the parcel.

While the phone camera apps will read only QR codes, other free apps can be used to read a variety of barcodes. I downloaded one Android app with the rather generic name Barcode Scanner in order to read the Virginia driver's license barcode. The same app reads QR codes, UPC codes, PDF-417 codes, CODE 39 (1D barcode type, which appeared above the address in correspondence I received from the Arlington County Government), Data Matrix (another square 2D barcode type), and some other types. I used that app to read the PDF-417 barcode on my Virginia driver's license.

ABOUT THE AUTHOR: John Krout has been writing about creative uses of personal computers since the early 1980s. Until April 2020 he was a software documentation writer, contracted to support a major federal government computer system. Now he lives on his IRA and writes whatever he wants to. He resides in Arlington Virginia with his son, many computers and cameras, and too many cats.

Why Linux?

by Jim Quinn

Vice President, Under the
Computer Hood User Group
November 2020 issue, Drive Light
www.uchug.org
vicepresident (at) uchug.org



In 2008 we (my wife and I) decided to do the 5-year plan to retire in 2012. We calculated our retirement income and expenses (including taxes) to make sure we could live satisfactorily on that amount.

This forced me to think about technology for us and our two daughters, and how to support them with hardware, software (Win 7), tech support, and what it would cost. I was always helping my daughters with problems fixing Windows 7 and computer hardware. So, I built 2 new computers for myself, specifications listed below, one was for Linux and one for Windows 7 (hardware to replace current Win 7 machine).

I also had to face the issue of software. A problem with proprietary software is that updates to the Operating System (OS) and applications may prevent them from running on your current hardware. Also, proprietary applications may no longer be supported by the OS (security updates) or abandoned.

Linux offers free software (the OS and the applications) with many choices of OS (distributions aka distros) and applications. That way, if either becomes unavailable or unsupported, there are many alternatives available. Linux distros vary from the highly technical (you choose what is included and you

compile your own) to ready to use distros (Linux Mint and many others, aka many flavors). You also have a choice of desktops; you can use a distro that looks like Windows, Mac, or any other desktop style. The good thing about Linux is you have many choices of distros, desktops, and applications.

In 2010 I found Linux Mint 9 and started my quest to see if it would work for me and my daughters, as I'm the tech support for them. I finally settled on Mint 9 MATE as the replacement for Win 7 as it seemed to have all the software applications the daughters would need and hopefully would also meet my needs. The Linux Mint 9 MATE interface was easy to learn and I really liked the multiple workspaces.

Within about a year, the daughters' computers started having Win 7 problems and hardware issues.

I started looking around for replacement computers and ordered a refurbished computer to test out Mint 9. TigerDirect and Newegg seemed to have good prices for prior models, so I ordered one. The testing went great, so I added a second hard drive (for automated backups) and a USB drive backup for the daughter to use.

Since moving my daughters' computers to Linux, my support calls have gone to almost nil. Most of the questions are related to how to accomplish a task with the applications. Linux is a multiuser system.

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My daughters and I have been using the long-term support (LTS) releases (around 5 years) of Linux Mint. The current release of Mint (LTS) is 20. The only time-consuming support with my daughters' computers is when I upgrade to a new release of the long-term support distro. This is due to both of my daughters having multiple users. It requires backing up their home folders, creating users with the same ID, restoring their home folders, and changing back the ownership of their respective files because my backup is done with admin rights. I'm seriously considering creating an application to perform this automatically or finding a backup program that will do this.

So Why Linux?

Windows 7 is no longer supported; this requires the possibility of purchasing a new computer as it wouldn't update my machine and definitely not my daughters' computers. This would also require purchasing new versions of the programs we need as they are not supported under Windows 7.

Now that Windows 10 is in full swing there have been many problems when installing updates. Also, Microsoft states this is the last version of Windows. It appears that most commercial programs are going to a monthly subscription or yearly subscription, which benefits them but not the user. For most of us, this means you cannot continue to use a program for years even if you do not need the updated features (lack of choice forced upgrades). Windows feature updates are only supported for two years, so does that indicate

that you'll need to update your computer, or are they preparing to implement a subscription service for Windows?

I'll step down from my soapbox now.

Each of my 2 new computers' specifications:

- Corsair Case Black, 300R
- Motherboard: ASUS P8Z77-V Deluxe
- CPU: Intel i7-3770K
- Memory: G.Skill, F3-1866C10D-16GSR – total 32GB
- ASUS DRW-24B1ST
- Pioneer DVD BDR-207UBK
- Western Digital, WD1003FZEX (2 each) for Windows RAID 1 and 1 for Linux Computer

Linux Mint web site – <https://linuxmint.com/>

How the Internet Has Changed the Real Estate Industry

Speaker: Wade Huie, LACS, Realtor

Meeting summary by Leah Clark

Los Angeles Computer Society Editor and President

October 2020 issue, User Friendly

www.lacspc.org

editor (at) lacspc.org



Wade has been a real estate agent in Los Angeles since 2003. He talked about the days of marketing by face-to-face contacts, door knocking, sending out cards, etc. Those who wanted to buy a house would look through newspaper ads, drive through a neighborhood

Continued on the next page

looking for “For Sale” signs, then they would call the agents listed on them.

The agents had all of the information on properties for sale in Multiple Listings Service (MLS) books. Some of the listings would be obsolete by the time the books were printed. Before the Internet, the system was not very efficient.

There has been a tremendous cosmic shift in the real estate business, as in other companies, due to the Internet. It has mostly been for the better. Realtors are no longer the gatekeepers to all the information. MLS became automated with listings on the computer rather than in the out-of-date books.

The clients are now in charge.

The Internet’s connection with Real Estate is here to stay. No one misses the old-school way of buying and selling property. Most homebuyers now begin their search on the Internet, which is mostly kept up to date. Much can now be done on a smartphone.

Most documents and contracts can now be made online with electronic signatures.

Pricing a house is still an art, not a science. The estimated value of a home can vary on different sites. Improvements or defects may not be considered in the estimates.

Wade said the best thing the Internet has done for real estate is what it has done with pictures.

Without going to a home, a buyer can get a feeling about it from images. Visuals are the most important, but photos can make or break a sale. Wade showed posted images of homes with much clutter and untidiness visible. Wade then talked about “staging” a home by putting in cool furniture, a few paintings, rugs, etc. enabling it to be sold for more money. The buyer can imagine what a house may look like. Staging may raise the price of a home; although it does cost to bring in all that stuff. Thanks to the Internet and software, a seller may provide “virtual staging,” which costs much less.



The use of video has become common in real estate. Cameras pan around each room to give a sense of what’s there. Using drones to depict the home and surrounding neighborhood makes it like walking around in a house.

Agents must now become, or hire, filmmakers.

Buying and selling real estate in the U.S. have been highly competitive, and both

Wall Street and Silicon Valley

want in on it.

iBuyers will buy your home, fix it up, then resell it on the open market. The “i” stands for instant. Wade thinks we may see more of them in the future, especially for those who may need to move quickly.

Continued on the next page

The Internet is not going to go away. It will continue to evolve, and it will be making buying a home easier. Real estate, from a family perspective, is still a local activity.

Buyers want someone with the knowledge and skills to help them make what may be the most important financial decision of their lives. If agents don't embrace the new technology, they may deserve to go obsolete.

Creating Poster Art from Photos

by Dick Maybach

Brookdale Computer User Group

August 2020 issue, BUG Bytes

www.bcug.com

n2nd (at) att.net



Creating attractive posters can be a challenge for those of us with limited artistic talent, and while using clipart is quick, often the result is poor. An alternative is to begin with a photo and use image-processing software to convert it to a graphic. In this article, I'll use GNU Image Manipulation Program (GIMP), <https://www.gimp.org/>, but most similar programs have equivalent features. As a result, I'll concentrate on the general processes, rather

than the details to execute them. Although GIMP and Photoshop have similar capabilities, their operational details are quite different, and moving from one to the other can be difficult.

Figure 6 shows an unprocessed photo imported into GIMP. The large dark area and the expanse of pavement will have to be removed to make this suitable for my poster.

In Figure 7 I initialized GIMP to begin the processing. Note that the right panel now shows two layers, a white background below and the photo above. Note also the second thumbnail on the right in the top layer. This is a mask, on which I can draw black areas to hide portions of the photo. I could instead erase these areas on the photo, but such changes would be permanent. If I hide too much using a mask, it's easy just to erase the excess marking. I've also added an alpha channel to this layer, which means that any areas I mask are transparent rather than being white. This will allow me later to use more than one layer at a time to combine the effects.

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Figure 6: Unprocessed Photo

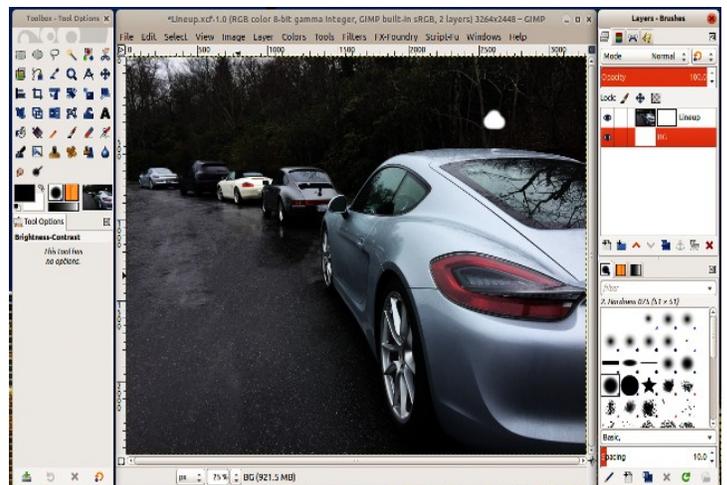


Figure 7: Photo Processing Initialized

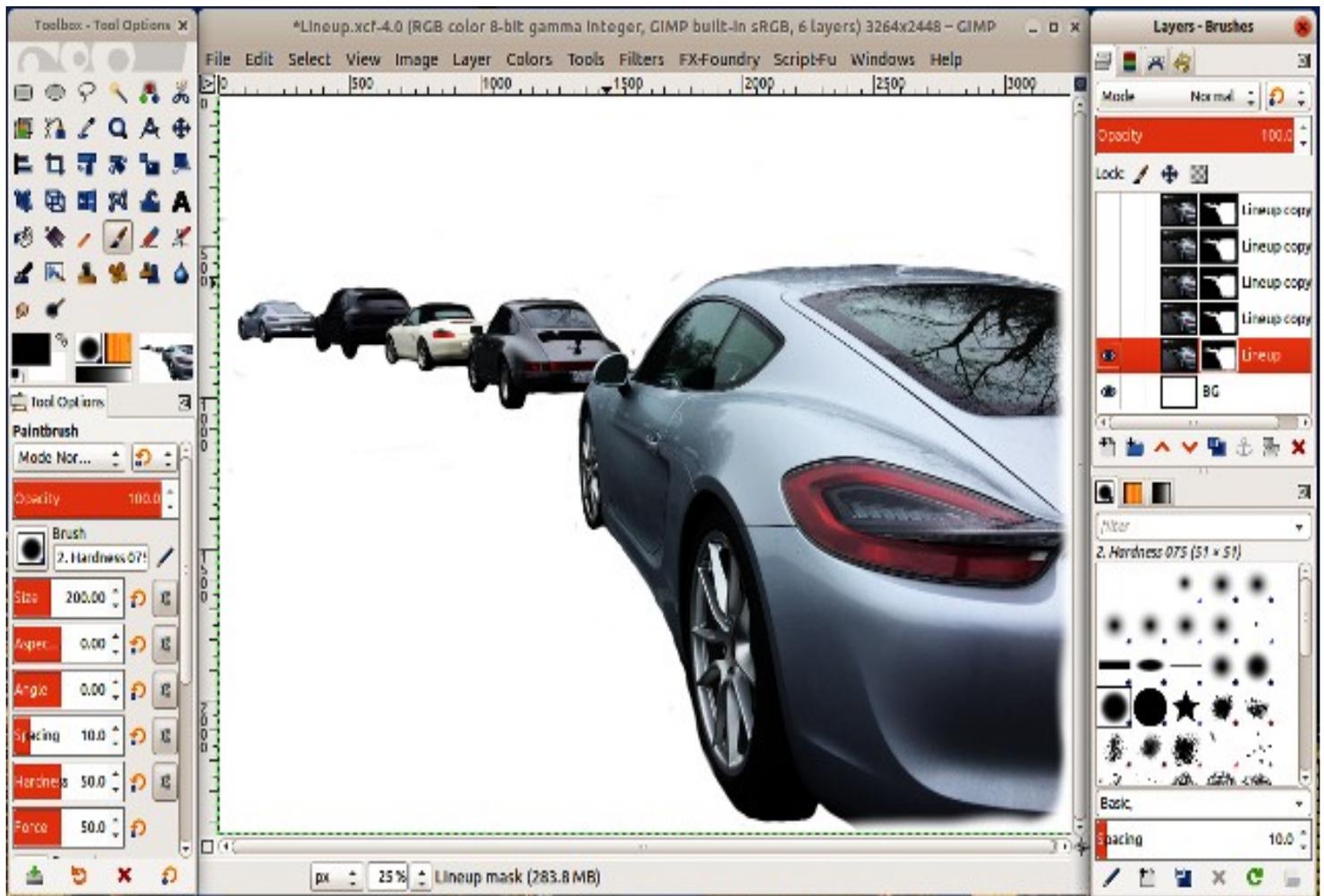


Figure 8: Masking Complete

Figure 8 shows the effect of masking. Since the graphic will be used for a car show, I've removed everything but the cars and added some vignetting to soften the sharp edges on the right. I've also duplicated the layer several times, so I can try different processing on each one. Masking is done by hand and is quite tedious, almost impossibly so with a mouse, but far more tolerable with a graphics tablet. I use one by Wacom, which is small (about six by eight inches) and available for \$70. Before duplicating the photo layer, be sure you have completed the masking, as you don't want to repeat this time-consuming process.

I used effects from the Grey's Magic for Image Computing (G'MIC) add-on for GIMP, <http://gmic.eu/gimp.shtml>; other high-end graphic processors have similar utilities. Figures 9 through 12 show the effects of some of its filters.

Note the layer titled "Lineup," which is the image of Figure 8, the photo after applying the mask but without an effect filter applied. The filters are destructive, that is their effects can't be undone. You will likely want to make some image processing adjustments after seeing the completed poster. By retaining the original

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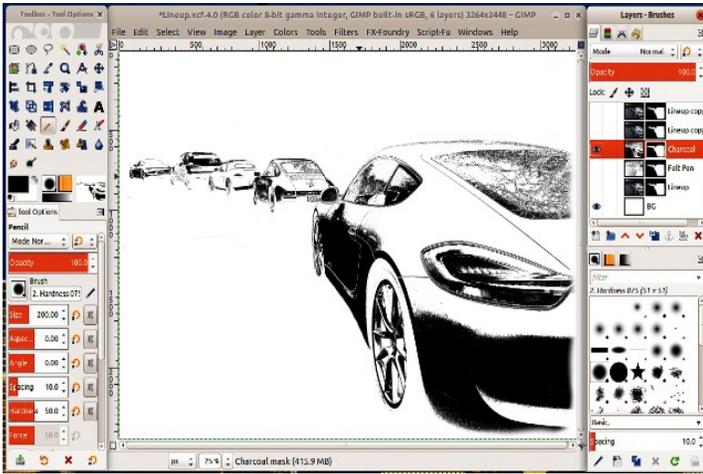


Figure 9: G'MIC Charcoal Filter

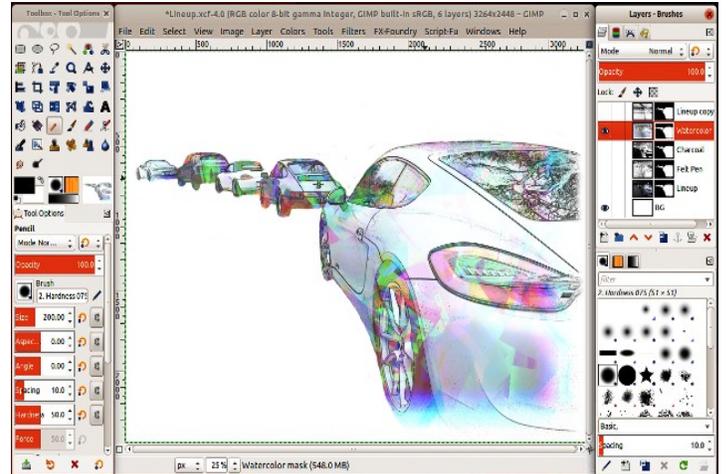


Figure 12: G'MIC Watercolor Filter

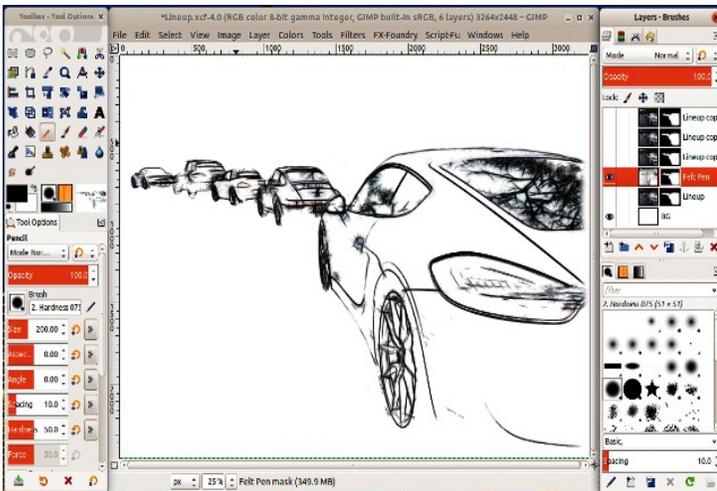


Figure 10: G'MIC Felt Pen Filter

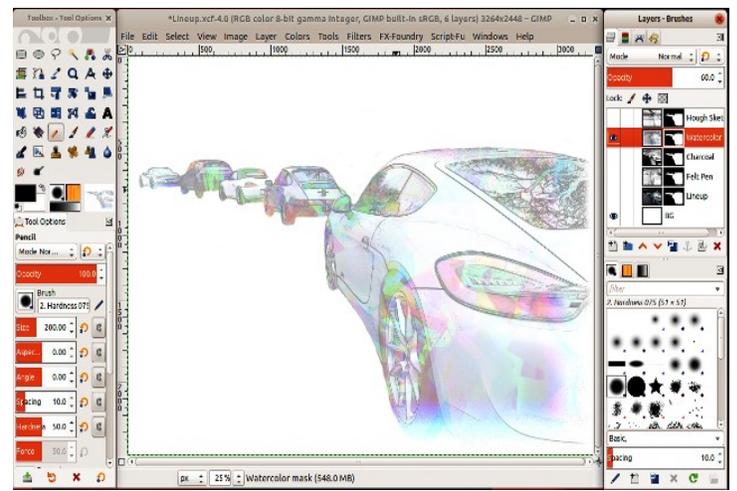


Figure 13: G'MIC Watercolor Filter with Reduced Opacity

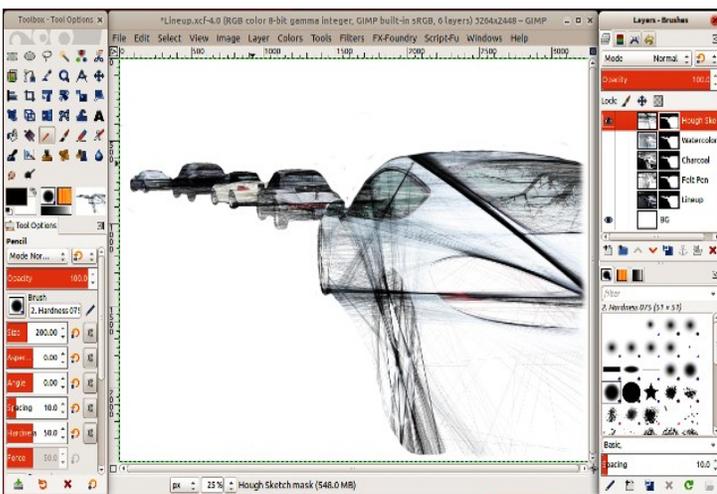


Figure 11: G'MIC Hough Sketch Filter

image with masking, you can do this without having to repeat the tedious and time-consuming process of making another mask. Often you will want to use the processed image as a background, meaning you'll have to fade it to avoid obscuring the material that overwrites it. In Figure 13 the opacity of the layer has been reduced to 60 percent, and while this would keep any foreground text legible, the details of the image are now hard to discern.

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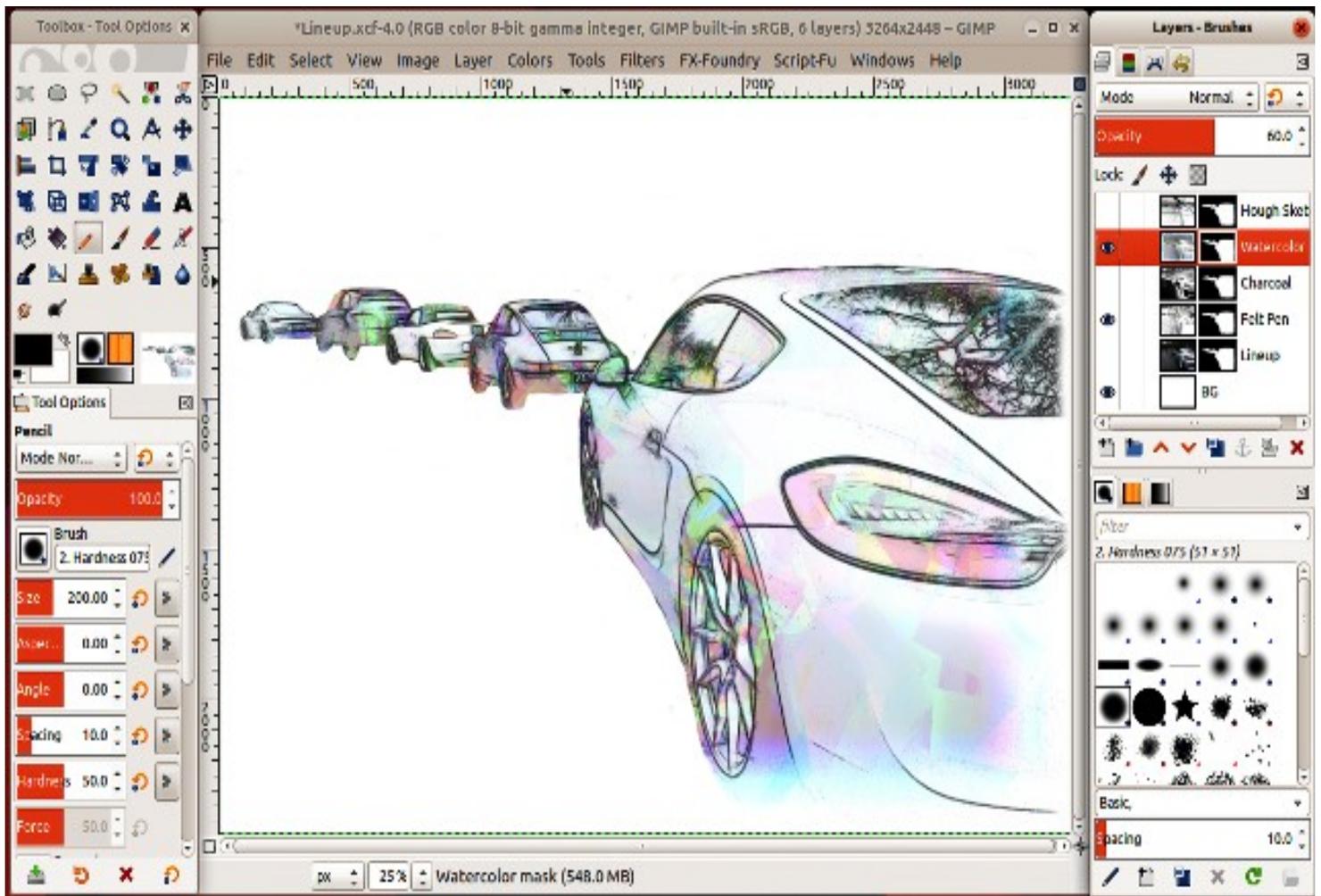


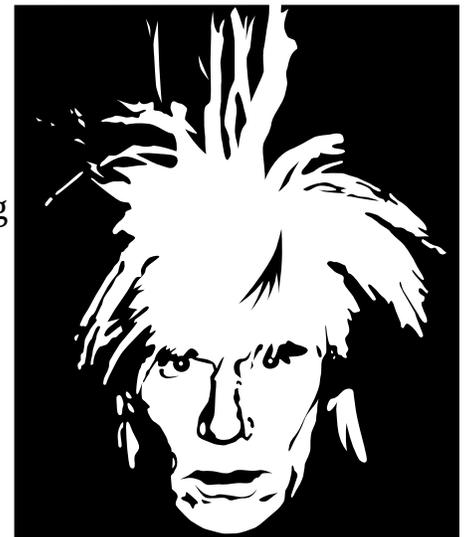
Figure 14: G'MIC Watercolor Filter with Reduced Opacity Combined with Felt Pen

A solution is to combine the watercolor layer with the felt pen one by making both layers visible as shown in Figure 14.

This preserves the cars' outlines while keeping most areas of the image muted. Of course, after seeing the complete poster you'll likely make some final adjustments. Posters are only one place where you can use graphics. After completing this project, I used a variant of the result as a background on a Website.

I've used GIMP here to illustrate what's involved, but it's similar to any high-end image processing program. As you probably have

gathered, the procedures are involved, and you should be familiar with image processing before beginning something similar. Don't make a project involving multiple layers and detailed masking your first graphic project.



PATACS Email Discussion List

Join the PATACS members-only email list to discuss tech topics of mutual interest, ask and answer questions, share resources, convey news, and increase our sense of shared community with fellow members.

Emails that are sent to the list email address and replies are distributed to all list subscribers.

You must be a current PATACS member and register a valid email address to join the list. Review the information at <https://groups.io/g/patacs> and click on the “Join This Group” button.

If you do not receive email from patacs@group.io after joining, check the spam folder in your email program and ensure your email program does not block this email address.

The following subheadings highlight topics with excerpts from posts to the list that provided useful links (TinyURLs substituted for long URLs in the original posts).

Emails – how much is too much?

Interesting story on email and whether you should delete individual emails:

<https://tinyurl.com/y6ncz8q7>

Following up on APCUG’s tasty webinar series on home automation...

...timely material from Consumer Reports:

<https://tinyurl.com/yf3mzg9y>

Are you a geek-or-a nerd?

Don McMillan explains the difference between a Geek and a Nerd in this funny video. Don is an engineer and a comedian so he has the brains to utilize fancy charts and graphs to make his point. He makes some good points about the everyday technology that we use like printer ink and USB devices.

<https://biggeekdad.com/2019/01/geek-or-nerd/>

The Old Edge Browser Is Going Away

If anyone is still using the “old/original” Win10 browser, say good bye! Microsoft April Security Patch Will Remove ‘Legacy’ Edge Browser – Redmondmag.com

<https://tinyurl.com/yjyw97xg>

What’s coming to Windows 10 this year

A couple of discussions on what’s coming to Win10 via updates this year:

<https://tinyurl.com/y68h4bu4>

and

<https://tinyurl.com/y8vzxqna>

Which Way?

Interesting article (*Ed. about orienting USB connectors*)

<https://tinyurl.com/y5xrc9n8>

WaPo article: Wikipedia turns 20

Wikipedia turns 20: Fighting disinformation on the world’s encyclopedia

Continued on the next page

An interesting review of how Wikipedia has evolved and works, using Wikipedia's coverage of the storming of the US Capitol as an example.

<https://tinyurl.com/ydrrwyr1>

Here's the referenced Wikipedia article if you want to skip the Washington Post paywall.

<https://tinyurl.com/yyka8e5a>

And here's Wikipedia's 20th Anniversary celebration page.

<https://wikimediafoundation.org/wikipedia20/>

The Cybersecurity 202: 'This Is How They Tell Me The World Ends' sheds new light on a global cyberweapons arms race

We all need to read this article – it concerns anyone using a computer!

Ed. The Washington Post article appended to the original post is online at

<https://tinyurl.com/ygks72zp>

A follow-up post provided a link to a podcast interview with the author of the referenced book, see

<https://tinyurl.com/ygfr6str>

Malware Is Now Targeting Apple's New M1 Processor

<https://www.wired.com/story/apple-m1-malware/>

PATACS Membership

PATACS memberships are now available via electronic payment for US \$30 per year.

Payment may also be made via check or cash at our meetings.

Benefits include:

- Eligibility for door prize drawings,
- Download of the full color, PDF-format PATACS Posts newsletter,
- Optional US Mail delivery of the B&W print edition of the newsletter,
- Access to the PATACS email discussion list,
- Access to our membership database for noncommercial use,
- Members may place classified ads in the newsletter at no charge.

The time, effort, and money saved from your association with PATACS will quickly exceed the nominal annual dues.

Apply for or extend your membership at <https://www.patacs.org/membership.html>. You may also use the membership application to update your membership contact information.



Special Membership Promotion

Current members who bring a new member to the organization will receive a six-month extension of their membership. New member is defined as someone who has not been a member in the 36 months prior to the month of the received application. The new member

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should list their name as the ‘source’ of their membership on the application form (<https://www.patacs.org/membershipat.html>).

Help Wanted: Meeting Speakers

Finding presenters for our meeting programs is difficult – your help in the effort to enhance the value we all receive from PATACS membership would be greatly appreciated!

Please consider speaking to your friends at an Arlington or Fairfax meeting. For example, we’d love to feature your take on a smartphone or tablet app. A presentation on these or other topics of interest to you would undoubtedly be welcomed by your PATACS colleagues. We have space in our schedule for 15, 30, 60 and 75 minute discussions – what are you waiting for?

We also have ready-made paragraphs you could use in e-mail communications to help us find speakers. Contact: director2@patacs.org.

PATACS Meetings Archive

Did you know that videos and presentation slides of most PATACS meetings are available on the PATACS website’s ‘Recent Meetings’ page?

Go to <https://www.patacs.org/recmtgspat.html> and scroll down for links.

Shopping on Amazon.com? Don’t Forget PATACS!

If you shop online at Amazon.com, sign up for AmazonSmile and select Potomac Area Technology and Computer Society, Incorporated as your preferred charity at

<https://smile.amazon.com/ch/54-1323790>.

Remember to shop for deals at smile.amazon.com, or with AmazonSmile ON in the Amazon app, and AmazonSmile will donate to PATACS at no additional cost to you.

Thank you for supporting your user group!

APCUG Resources

PATACS is a member of the Association of Personal Computer User Groups (APCUG), a worldwide organization that helps technology user groups by facilitating communications between member groups and industry vendors.

Archived APCUG Presentations

Presentation PDFs and handouts can be found at

<https://apcug2.org/category/virtual-tech-conference/>.

APCUG presentation videos are posted on YouTube at

<https://www.youtube.com/apcugvideos>.



President, Registered Agent, Internet Services:	Paul Howard, 703-860-9246, president@patacs.org
1st Vice President:	Ron Schmidt, 301-577-7899, director11@patacs.org
2nd Vice President, Membership Chair:	Mel Mikosinski, 703-978-9158, membership@patacs.org
Secretary:	Jim Rhodes, 703-931-7854, director7@patacs.org
Treasurer:	Roger Fujii, 703-426-5917, treasurer@patacs.org
Meeting Setup, Director:	Bill Walsh, 703-241-8141, director14@patacs.org
APCUG Liaison, Director:	Gabe Goldberg, apcugrep@patacs.org
Directors:	Leti Labell, Melvyn Sachs, Charles Throneburg, Nick Wenri, Steven Wertime, Henry Winokur
Newsletter Editors:	Kathy Perrin, Geof Goodrum, Henry Winokur, editor@patacs.org
Columnists:	Volunteers Needed
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Back Issues: Public links to *PATACS Posts* issues in PDF format are available at <https://www.patacs.org/newsletter.html> three months after publication.

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PATACS Monthly Event Calendar

For meeting announcements, call 703-370-7649 or visit www.patacs.org.

All meetings will be held virtually via Zoom videoconferences until further notice.

Program meetings include one or more educational presentations.

Arlington General Meeting	7:00-9:00 PM	1 st Wednesday
Board of Directors Meeting	7:00-9:00 PM	3 rd Monday
Fairfax General Meeting	12:45-3:00 PM	3 rd Saturday
Technical & PC Help Desk	7:00-9:00 PM	4 th Wednesday