TC/PC Exists to Facilitate and Encourage the Cooperative Exchange of PC Knowledge and Information Across All Levels of Experience

November 2024

General Meeting
Tuesday, November 12, 2024

7:00 PM

Apps for Identifying

Images and Music

Via Zoom Only

This month we'll watch some webinars on identifying and getting information about an image, whether a painting in an art gallery or a photo of an unknown bird or the need for translating a document from a foreign language into English. We'll look at other apps that can help you identity the name and artist or composer of a particular piece of music, regardless of the source. If you have used similar apps, be ready to share with the group.

Note: All TC/PC Meetings and SIG Groups will be virtual until further notice. Visit tcpc.com for info.

Tech Topics with Jack Ungerleider via Zoom at 6pm before the General Meeting.

The Digital Viking

The Digital Viking is the *official monthly publication of the Twin Cities PC User Group, a 501(c)(3)organization and an all-volunteer organization dedicated to users of IBM-compatible computers. Subscriptions are included in membership. We welcome articles and reviews from members.* The Digital Viking is a *copyrighted publication and reproduction of any material is expressly prohibited without permission. Exception: other User Groups may use material if unaltered and credited.*

Disclaimer: *All opinions are those of the authors and do not necessarily represent the opinions of the TC/PC, its Board of Directors, Officers, or newsletter staff. TC/PC does not endorse, rate, or otherwise officially comment on products available; therefore, readers are cautioned to rely on the opinions presented herein exclusively at their own risk.* The Digital Viking, *its contributors, and staff assume no liability for damages arising out of the publication or non-publication of any advertisement, article, or other item. All refunds in full or in partial, for advertising, membership or any other item shall be at the sole discretion of the Twin Cities PC User Group Board of Directors.*

Advertising

Full page (7½ x 9½)	**$100.00**
Two-thirds page (7½ x 6)	**80.00**
Half page (7½ x 4¾)	**65.00**
One-third page (7½ x 3)	**50.00**
Quarter page (3½ x 4¾)	**40.00**
Member Bus. Card (2 x 3½)	**10.00**

Multiple insertion discounts available.

Contact Sharon Walbran at:: SQWalbran@yahoo.com

Deadline for ad placement is the 1st of the month prior to publication. All rates are per issue and for digital or camera-ready ads. Typesetting and other services are extra and must be requested in advance of submission deadlines.

Payment must accompany order unless other arrangements are made in advance. Place make checks payable to: **Twin Cities PC User Group**

TC/PC 2024-2025 Board of Directors

Meets once or twice per year. All members welcome to attend.
Visit www.tcpc.com for meeting details.

President —Lee Kaphingst	leekap@comcast.net
Vice President —Curtiss Trout	ctrout@troutreach.com
Secretary - Sharon Walbran	sharon.walbran@gmail.com
Treasurer - Sharon Trout	strout@troutreach.com
Newsletter Publisher Sharon Walbran	952-925-2726 sharon.walbran@gmail.com
Web Master Curt Trout	ctrout@troutreach.com

Board Members:

Steve Kuhlmey	skuhlmey@hotmail.com
Lon Ortner	612-824-4946 lon@csacomp.com
Lee Kaphingst	leekap@comcast.net
Jeannine Sloan	Ambassador for Friendship Village
Curtiss Trout	ctrout@troutreach.com
Sharon Trout	strout@troutreach.com
Jack Ungerleider	jack@jacku.com
Sharon Walbran	sharon.walbran@gmail.com

Newsletter Staff

Editor Sharon Walbran

My Smartphone, My Friend

Greg Skalka, President, Under the Computer Hood User Group
https://uchug.org/
President (at) uchug.org

I got my first smartphone, a low-cost ($150) Samsung Galaxy J3, in 2017. It was not that powerful and I was a bit apprehensive about this new device, so I used it mostly for phone calls, texts and select apps. I saved web browsing and email for my computers and laptops as the phone screen seemed too small. As I warmed up to the smartphone I found it essential for navigation (with Google Maps). Having a camera handy, as poor as it was compared to my Panasonic Lumix digital camera, became another feature I used constantly. As time passed, I added more apps but was selective about what I chose to install. I had no time for games and no use for social media, but I used several smart home apps to control the various devices I bought. I refused to do banking or conduct any financial transactions on the phone, preferring the relative security of a computer for any online banking or shopping.

Every business seemed to have a smartphone app to promote, but I only installed a few that I thought were safe and offered compelling benefits worth the risks. One of the riskiest apps I use is Google Maps, as I have found over the years that it has been tracking me, even when the app is not running.

However, its benefits are so compelling that I've made that bargain with the Google devil and accept being tracked in exchange for its navigation capabilities. Having every store and sandwich shop app seems like a foolish risk that is usually not worth it. I don't want Google to also know what I'm going to do in the future and whom I associate with, so I refuse to use a calendar app on my phone or computer.

One app I do accept is the Southwest Airlines app, as it is so much handier than checking in for flights online with a computer. The Southwest app finally drove me in 2022 to buy a new smartphone, as their app developer stopped supporting my old phone. I bought a Samsung Galaxy S22 and am hopefully spending real money ($700) to buy more performance and tech longevity.

As with my first Samsung, I bought myself a very rugged case for my S22 to allay my fears of damaging the phone. With the belt clip front, the phone is fully enclosed when I carry it. I use magnetic USB adapters and charging cables to protect the phone's USB type C connector from excessive wear. I mostly charge my phone from a battery pack in a fast-charge mode and now use settings in the phone to limit charging to 85% of capacity most of the time, to extend battery life.

Over time I've found my use of the phone has only increased. With a higher resolution camera in my S22, I find I'm using it much more and my dedicated digital cameras much less often. Last fall the number of prescription drugs I needed to take increased and some came with restrictions I had to follow; I found the smart phone to be very useful in medication management. One medication required it be taken at least two hours after eating and at least one hour before eating; I found the best time to take it was immediately upon waking (I don't believe I do any sleep-eating). The problem is that I normally get up early and leave the house for work in less than an hour; this meant I often had to wait around a bit before eating breakfast and going to work.

I found my smartphone could be very useful in helping me manage this. The first thing I do when I get up is take this particular medication. I then immediately note the time on my phone and write that time into a document on the phone (for reference, should I get confused). I then set an alarm on the phone to melodically go off in an hour, indicating when I may eat breakfast. I often have to wait a

little, but even though the time I get up can vary, this system keeps me from eating too soon after the meds. I have another medication I must take with food at dinner; another alarm set for a nominal dinner time each day helps remind me. I also take another medication once a week on a specific day, so another alarm on my phone reminds me of that.

The breakfast alarm could also be done using Alexa, but my talking to set it could be more disturbing to my sleeping wife. The other alarms on my phone can remind me even if I have gone out for dinner.

I used to wake up to a plug-in, battery-backed-up alarm clock at my bedside. It is more a wake-up alarm of last resort, as I typically wake up before it goes off. I always kept my phone in another room at night as I didn't want to be awakened by late-night spam calls. When we remodeled our bathroom last fall, we had to temporarily move into our guest bedroom. I didn't want to change my alarm clock, so I just used my smartphone alarm (which I do when I travel). I got used to it, and since there were no overnight spam calls, I've kept using my phone as my alarm clock since moving back into our bedroom.

My phone is also a convenient memory aid; I keep many lists on it in the Samsung Notes app. In addition to shopping lists, it has many pieces of information that I don't want to have to keep looking up. Printer cartridge part numbers, oil filters, and oil types for cars are easy to look up on my phone when I'm in the store.

Sometimes, when I get an idea for a newsletter column, I write down a few notes on my phone. I can keep an inventory of my mom's supplies on my phone, which can be easily updated when I visit her assisted living facility, and then needed items can be ordered when I get home.

Text messages are also a convenient way to keep track of information and events that can be referenced later.

My siblings have a text chain that we have used over the last few years to disseminate information about our elderly parents. It is easy to look in that text chain to see the events significant to my dad's passing, when my mom had medical issues, and how things have changed over time. Now that I'm overseeing my mom's care, my text reports to my siblings are a good record to keep.

Communication is a primary function of the smartphone, though how well it works often depends on the capabilities at the other end of the link. My mom has a "senior-oriented" smartphone but only uses it for phone calls. She can't send or receive text messages or photos connected to them. My other siblings live out of the area, limiting.

My wife found a great gift for my mom this last Christmas. It is a photo frame with an added capability. Its display cycles through the photos in its memory, but its Wi-Fi connection can add pictures to the frame. My siblings and other relatives can send photos to the frame from anywhere using a smartphone app. My brother even wrote a short note, took a picture of it, and sent it as a kind of text message.

I'm constantly finding new ways to use my smartphone. With new ways to use it being developed all the time, it continues to become a closer friend.

Hit the Streets!

By Lynda Buske
Published in Ottawa PC News (September 2023)
Ottawa PC Users' Group, Ontario, Canada

Wikipedia says street photography features subjects (usually people) in candid situations within public places. The image may exclude humans and be an object that projects a human character or environment. For example, it may show the beauty of a flower stall or an interesting sign. Some photographers use street photography to make a social comment on issues such as homelessness or racism.

Street photography might require engaging in a conversation with a stranger to get the best shot. This can be daunting for anyone who is a bit introverted. Vendors are probably the most approachable if you are new to street photography and are willing to pose or share details of their craft if you buy something. So, if you are buying vegetables anyway in an outdoor market, choose a stall that may result in a nice photo.

Street musicians are another great place to start because they are happy to pose if you throw a bit of change into their hat.

You can also ask permission to take someone's photo, as I did with this lady from Saskatoon. I gave her my card so she could write me if she wanted the photo of her relaxing afternoon in a Halifax Harbour hammock.

Canadian laws are not strict when it comes to photographing people in public, but they check when visiting a foreign country to know what is permissible. In Canada, it is perfectly legal to take someone's photograph while they are in public, providing you are not harassing or stalking them, and the photo is not for commercial purposes (if an identifiable person is the main subject).

However, in order not to infringe on someone's privacy or make them uncomfortable (especially mothers with respect to their children), it never hurts to ask permission or be very quick. If I'm not

getting permission, I will set up my shot while pointing in a slightly different direction and swing back only at the last minute to my intended target. A tip is to hold the camera at waist level and shoot from there, although it will take some practice to get to know what will be captured from this angle. Another way is to shoot at a wider angle than you need and straighten/crop afterward.

Cell phones are in some ways better than traditional cameras because they are less obvious, and you can pretend you are taking a selfie! This is especially easy in high tourist areas where any number of people will have visible cameras and cell phones.

I am very careful with children in public as it can be very distressing for the parents to see someone take multiple photos of their child. I take a couple from far away and only post them if their faces are obscured. Never post a child's photo online taken with a cell phone (or camera with GPS) that includes their name. A bad person can find the exact location and call the child to their car by name….not good.

Recover Your Wi-Fi Password
David Kretchmar, Hardware Technician
Sun City Summerlin Computer Club
https://www.scscc.club
dkretch (at) gmail.com

Computer users often seek technical support when they cannot access the Internet via their home wireless system.

First, the technician will usually walk the user through the reset procedure for the router or router/modem (turn them off and on). If that does not fix the problem and it is determined the modem is receiving a good signal, the subsequent conversation often goes something like this:

Technician: What is your password for your router?

User: I don't have a password.

Technician: If your router is not secured (i.e., password protected), you should be able to connect.

User: I don't have a password. I click the Google (or other browser) icon and get online.

At this point, the Technician explains to the User that the password is stored on the User's computer and that a few steps are required to access that password. The technician might guide the user through the process of recovering the password using the following procedure:

If the computer connects to the Wi-Fi, it automatically.

Microsoft has buried the Wi-Fi password on a computer more deeply with the latest version of Windows 10 and 11 than with prior versions. It is the same procedure for both 10 and 11. You can still find your Wi-Fi password using the following steps (note … where I use the term "click," I mean a single click on the left mouse button or a single tap on a touchscreen.):

Find your way to the "Wireless Properties."

Open your Control Panel (Type "Control Panel" into the search box to the right of the Windows button on your Taskbar and Enter). Click on Network and Internet. Click on Network and Sharing Center, then click on the name of your network, which appears in blue. In the Wi-Fi window that opens, click on Wireless Properties. In the new window that opens, click on the Security tab, then check the box on Show Characters.

If you only own a smartphone/tablet or have a PC that has not stored the Wi-Fi password
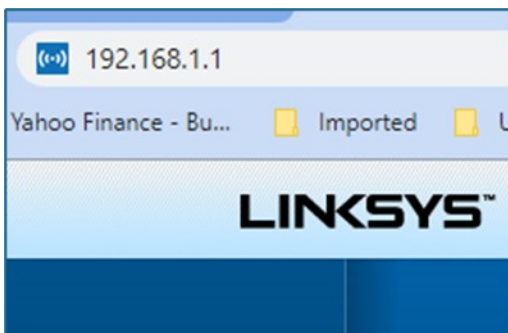
Log in to your router as an administrator. You can access your router by entering its IP address into your browser, such as Google Chrome or Microsoft Edge. You can research the default IP address of your router by Googling "IP address [brand name of your router]. Every router I've dealt with had an address of "192.168.X.X". The most common value for X is the number 1 (for both Xs). If that does not work, try substituting the numbers 0 or 2 for one or both of the Xs. After you log in, you should be able to find the Wi-Fi settings on the

Administrative pages of your router. There, you can look up your password.

IP settings

IP assignment:	Manual
IPv4 address:	192.168.1.211
IPv4 subnet prefix length:	24
IPv4 gateway:	192.168.1.1
IPv4 DNS servers:	192.168.1.1

Ed. Note. On Windows 10/11, you don't have to guess. You can find the internal IP address of your network router by going to Settings > Network and Internet > Status and, under the name of your Wi-Fi (or Ethernet) connection, clicking Properties. A screen will display; near the bottom are the IP settings. The IPv4 gateway IP address is the internal address of your router.

If you are like many people

The Wi-Fi password is often written on a sticker on the back of your router. This is how I usually set up home routers, and it might be a good thing to do after you have recovered your Wi-Fi password.

This is a simple but effective strategy since it is easy to find.

A burglar would have to break into your home to steal your password, and they probably would focus on more tangible items.

Printing your photos

By Lynda Buske
Published in Ottawa PC News (Month Year)
Ottawa PC Users' Group, Ontario, Canada

Despite our digital world, it is really nice sometimes to print a photo that you can stick on your fridge, display on your wall, or even frame and give as a gift. The main thing to remember is that the print size for a digital image may be limited.

All digital cameras and cell phones have sufficient megapixels to provide the resolution for a 4x6 or 5x7 photo enlargement. Many would have enough for much larger prints (e.g., 8x10 or 11x14). However, cropping in post-production will reduce your image dimensions.

The best starting point is determining what a good quality home or commercial printer will provide. In most instances, the gold standard is 300 dpi (dots per inch), which you can equate to 300 pixels. That means if you want to print an 8x10, the long side of your image would ideally be at least 3000 pixels (10x300). For 16x20, you would probably like the long side to have around 6000 pixels.

The table below provides a rough guideline for the maximum print size of good quality that you can expect based on the number of megapixels your camera has.

Camera resolution	File size at high resolution (pixels)	Max print size at 330 dpi
2 megapixels	1200 x 1600	4 x 5
3 megapixels	1536 x 2048	5 x 7
	2448 x 3264	8x 10
8 megapixels	2592 x 3888	8 x 14
	2800 x 4000	8 x 14
10 megapixels	3264 x 4920	11 x 14
	3744 x 5616	12 x 18
12 megapixels	4000 x 6000	16 x 20
16 megapixels		
21 megapixels		
24 megapixels		

If you have a 24MP camera, your images will probably be 6000x4000 pixels. This means you can do a lot of cropping before going under the 3000-pixel threshold. If you shoot with a 12 MP camera and then crop your images significantly, you may not be able to print an 8x10. However, if your cropped image dimension is still around 1200x1600, based on the chart above, you could print a 4x6. Some older cell phones have only 5 or 6 megapixels, so be careful when deciding what size to print. Unfortunately, many family pictures we want to treasure are taken at social events with cell phones, so get close to minimize the need to crop. Unless you are sure your cell phone has an optical zoom on the camera, don't "zoom" with the finger spread as that is just cropping and hence losing resolution. Even if cell phones tout 20MP or 100MPs, almost all only output 12MP due to

pixel binning [https://en.wikipedia.org/wiki/Pixel_binning].

The easiest way to see your image's dimensions in the Windows environment is to go to *File Explorer* and right-click on the photo. Then click on *Properties*, select the detail tab, and find the dimensions below.

One final consideration when making prints is the viewing distance. If you print a 4x6, there is a good chance it will be held in your hand or an album and, hence, very close to your discerning eye. If, on the other hand, you make an 11x14 print for your wall, it may never be viewed at less than a few feet, and therefore the resolution does not have to be as good.

You may have to experiment as to which image dimensions produce an adequate enlargement for your viewing needs and which printing service provides the quality you want. I recommend printing one 8x10 as a test before committing to a company. When submitting digital photos online, many services will warn you if the resolution is not adequate for the print size you requested.

I have found the quality of prints at Shutterfly and Photobook Canada to be very good, but there are significant delivery fees. On the other hand, Staples has the quality but no delivery fees if you pick it up at the store. However, it takes five business days. If you want a quick turnaround of 4x6 prints, a place like Walmart is probably all you need.

Really, *really*, deleting files

by Chris Taylor, President
Ottawa PC Users' Group, Ontario, Canada
Published in Ottawa PC News (September 2023)
https://opcug.ca
Editor: brigittelord (at) opcug.ca

When you delete a file in Windows, the actual on-disk data is not removed. The file is usually moved to the Recycle Bin, where it can be easily recovered. Even if you empty the Recycle Bin or bypass the Recycle Bin by holding down the Shift key while deleting files, the data remains on disk. All that happens is the pointers to the file are removed, making the space available for new files.

Recovering deleted files

Utilities to recover deleted files date back to *Unerase* in the first version of the Norton Utilities in 1982. They continue to this day with dozens of free and commercial programs available for Windows, macOS, Linux, Android, and iOS.

If you are in a high-security situation, please ignore this article. It is intended for the average home or business user whose adversaries are not about to use magnetic force microscope techniques to recover data. If you are likely to have CSIS looking for your deleted data, you need to go well beyond what I recommend here.

Making data unrecoverable

When you want to dispose of a storage device, you should ensure all sensitive data is deleted and *unrecoverable*. This can be achieved by physical destruction of the storage device: hard disk drive (HDD), solid-state drive (SSD), flash drive, etc., or—if you want the storage device to be reusable—by over-writing the data areas of the disk with random data, obliterating the original data.

Some secure deletion programs boast of capabilities such as the Gutmann algorithm, which overwrites all data with 35 passes. For the average computer user, I wouldn't worry beyond a single pass.

There are many programs available, both free and commercial, for secure data removal. The programs I list are not necessarily the best—they are simply programs that have been around quite a while (have stood the test of time), are free, and have been used successfully either by me or other members of OPCUG.

Be careful using secure deletion programs. By their very nature, there is no "undo" button! There are several levels of overwriting data: individual files, free space on the drive, and the entire disk.

Individual files
If you just want to make a few files unrecoverable, there are programs that can target individual files or folders of files. One example is the free and open-source program File Shredder (https://www.fileshredder.org/). It is very simple and straightforward to use.

Free space
Storage devices eventually end up with data in all locations on the device. The free space has data that was used for files that have since been deleted. You have no way of knowing what recoverable data might be there. Some programs can target free space and securely overwrite data there. File Shredder is one program that can wipe free space.

Entire disks
If you want to securely delete all data on an entire storage device, HDShredder (https://www.miray-software.com/products/applications/hdshredder.html) is available in free and commercial versions. The free version should be sufficient for the vast majority of users. The website details the additional capabilities in the commercial versions.

Another popular program for securely erasing all data on storage devices is the free and open-source DBAN (https://sourceforge.net/projects/dban/). DBAN was acquired by Blancco in 2012 and is no longer in development but remains popular. I recently had occasion to use DBAN to help a friend dispose of an old laptop, and it was quite easy to use DBAN to ensure the entire hard drive was securely wiped.

DBAN comes as a disk image (.ISO file), so you will need a program to create a bootable flash drive, CD, or DVD using the DBAN ISO file. Free options are available, such as Rufus (https://rufus.ie/en/), NCH Software's Express Burn (https://www.nch.com.au/burn/index.html), and Ashampoo Burning Studio Free (https://www.ashampoo.com/en-us/burning-studio-free).

Solid state drives
Due to the architecture of the technology, SSDs cannot be securely wiped in the same manner as HDDs. If you want to securely delete data from SSDs, check that the software you are using specifies that it works on SSDs. EaseUS has a free version of Partition Manager (https://www.easeus.com/partition-manager-software/securely-erase-ssd-hdd.html) that can securely erase SSDs.

Some SSD manufacturers provide special utilities to securely wipe their devices, such as Samsung's Magician (https://semiconductor.samsung.com/consumer-storage/magician/) or Crucial's Storage Executive (https://www.crucial.com/support/storage-executive). Personally, if the manufacturer of your SSD has a special utility for securely erasing their branded SSDs, I would choose that option.

Final words
Rather than destroying or securely wiping old storage devices, you might want to repurpose them for your own use. Inexpensive drive enclosures are available: you can install your old storage device in one and then plug it into a USB port to use it as an external drive.

While this article details effective means of securely removing data, if you can't be sure you have completely removed all sensitive files from your device, you might be better off destroying the device rather than disposing of it.🖥

SUN	MON	TUES	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9 Linux on Saturday SIG 9am—Noon
10	11	12 7 pm General Mtg Apps for ID'ing Images and Music 6pm Tech Topics	13	14	15	16 MS Office SIG (includes Access) 9am—Noon
17	18	19	20	21	22	23
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10 7pm General Mtg TBA 6pm Tech Topics	11	12	13	14 Linux on Saturday SIG 9am—Noon
15	16	17	18	19	20	21 MS Office SIG (includes Access) 9am—Noon
22	23	24	25	26	27	28
29	30	31				

November

December

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. *Virtual Meetings during Covid pandemic.*

Twin Cities PC USER GROUP

You have just read an issue of The Digital Viking.

Would you like to receive this delivered directly to your email or business each month?

As a member of TC/PC, the Twin Cities Personal Computer Group, one of the benefits
is reading this monthly publication at www.tcpc.com..

As a member of TC/PC, you may attend any or all of the monthly Special Interest Group (SIG) meetings and be eligible for
software drawings. The small membership fee also includes
access to real-live people with answers via our helplines, discounts, and various other perks.

Does membership in this group sound like a good way to increase your computer knowledge?

It's easy to do! Simply fill in the form below and mail it to the address shown.
(If you use the form in this issue, you will receive an extra month for joining now.)

11/24

Here's the info for my TC/PC Membership:

Full name_____

Company name_____

Address_____

City_____ State_____ Zip_____

❍Home ❍Business ❍Change address: ❍Perm. ❍Temp. 'til _____

Home phone_____ Work phone_____

Online address(es) _____

Where did you hear about TC/PC? _____

❍ I DO NOT want any of my information disclosed.
❍ I DO NOT want to receive any mailings

I'm signing up for:
❍ Individual/Family Membership ($18)
❍ Business Membership ($100)
If an existing member your # _____
Make checks payable to:
Twin Cities PC User Group
341 County Rd C2 W
Roseville, MN 55113

Or sign up on our website:

http://www.tcpc.com

❍ Check #_____ ❍ Bill me
❍ New member ❍ Renewal ❍ Prior member
I'm interested in:
❍ Training classes ❍ Volunteering
❍ Special Interest Groups: New User, Access, etc.
List here:

Administrative Use Only   Rec'd_____ Chk#_____

November 12, 2024
7:00 pm
General Meeting

Apps for Identifying
Images and Music

Via Zoom Only

Twin Cities
PC USER GROUP

341 County Rd C2 W
Roseville, MN 55113