



Minneapolis & St. Paul, Minnesota USA • Vol. 39 No.10• May 2019

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

**May 2019** 

Membership Information2
Add a Display!3
A Great PhotoShop
Alternative4
Build a Wall?5
CES 20198
Encrypting a Drive 11
SIG Information13
TC/PC Calendar14
Membership Application 15
Maps to Events16

# General Meeting Tuesday, May 14, 2019 7:00 PM

**CES 2019** 

**Virtual Tours** 

Summit Place 8505 Flying Cloud Drive Eden Prairie, MN 55344

If you were not able to make it to the annual Consumer Electronics Show in Las Vegas this last January, here is a chance to see video tours from those who did. We will view a selection of videos that focus on the newest and best-of-show gadgets and robots and cars and lighting and security devices that visitors found most interesting. [There may be snacks, if the organizer gets organized.:-)]

Tech Topics with Jack Ungerleider leading off our meeting at 6:00 PM. Always new stuff to learn. ■

TC/PC is a Member of



### 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 2018-2019 Board of Directors

Meets once or twice per year. All members welcome to attend.

Visit www.tcpc.com for meeting details.

 President —William Ryder
 br@rydereng.com

 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 csacomp@comcast.net

William Ryder br@rydereng.com

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

### TC/PC Member Benefits

Product previews and demonstrations

Special Interest Groups Monthly Newsletter

Discounts on products and services

Contests and prizes

# **Business Member Benefits**

All of the above PLUS:

FREE ½ page ad on payment of each renewal

20% discount on all ads Placed in the *Digital Viking* Newsletter

Up to 5 newsletters mailed to your site (only a nominal cost for each additional 5 mailed)

#### **Newsletter Staff**

Editor Sharon Walbran

## Add a Display!

By Dorothy Fitch, Editor, Green Valley Resort Computer Club, AZ February 2019 issue, Green Bytes, www.ccgvaz.org Newsletter (at) ccgvaz.org



Photo Credit: everystockphoto.com

If you spend a lot of time at your computer, as I do, you might want to consider having two separate monitors. I love my two displays, as it gives me lots of extra digital "real estate" for when I have many windows open. I can use the mouse to drag windows from one monitor to the other. The second monitor can display the task bar and clock at the bottom, and you can even extend images across the two displays or show the same content on both monitors.

On Windows 10, to set up or adjust multiple displays, go to Settings>System>Displays. One monitor will be your primary monitor, and the other the secondary one. You can have a different resolution setting for each monitor. You can also swap the positions of the icons in the Settings area so that when you want to drag a window to the other monitor, you don't have to drag your mouse the opposite way, which is quite counter-intuitive! Click to read about dual monitor setups.

But what do you do when a monitor fails, as my second display did the other day while I was working on this Green Bytes newsletter? The contents of a file open on that monitor started to flicker and then I watched the monitor turn completely black. Oh, my.... There were a number of open windows and documents displayed on that monitor and now I couldn't get to them! What to do? Google to the rescue!

By Googling this text -- see files when second monitor is off -- <u>I found the answer!</u> All I had to do was hold down the Shift key as I right-clicked the icon on the Taskbar for the document I couldn't see. I could choose the 'Move' option from the menu, and then use the right-arrow key on the keyboard to move the window, little by little. Lo and behold, it came into view on my one working monitor.

If you have room on your desk and a second monitor available, you might enjoy having the extra room for all your work (and play).  $\blacksquare$  Got to Page 1

## A Great Photoshop Alternative

By Sheila Swaikowski, Webmaster, The PCUG of Connecticut March issue, The Program, www.TPCUG-CT.org sswaikowski (at) yahoo.com

Gimp is a great free image manipulation program much like Photoshop. Here is a YouTube link to a 13+ minute video of a basic beginners' guide that I found very helpful: Q8C0LJPpr64.mp4. It is entitled 'How to Use Gimp (A Beginners Guide)' and produced by TechGumbo. According to the instructor, Gimp is one of the top five best free Photoshop alternatives and his favorite.

The video begins by showing where to go (gimp.org) to download Gimp and walks you through the whole download process. Then it goes over the layout you should see when you start Gimp: the primary window in the center, the toolbox on the left and the layers window on the right.

The instructor starts a new project by creating a new image from the file tab at the top. He shows how to scale it down (resize it) and add a background color.

Gimp works with layers, which is a new concept for me. Changes are made on individual layers which become part of the whole exported image at the end. If a change has to be made, you can go back to that particular layer which has what you want to change. You create a new layer from the right layer window. The video shows how to create text in a new layer by going to the toolbox, selecting the text tool, then selecting a different text color and changing the text size. It shows how to use the move tool to move the text anywhere in that layer.

If you don't like what you produced, you can go back to a previous step or steps by going to the Edit tab at the top and choosing Undo Move Text Layer which will undo the last operation or using the shortcut, ctrl z, until you get back to the step you want.

The instructor creates an oval in a new, second layer, by selecting an ellipse tool from the tool box; other options are the rectangle tool or circle tool. He also shows how to use the blend tool in the background to show a color variance in the background.

In this video there are three levels: the background image, the layer with the text and the layer with the oval drawn on it.

When you are done, its time to export the created image by going to the File tab and clicking on Export As and exporting the image in the file type you want, png or jpg being the most popular. Even though you work with each level separately in Gimp, they become one image upon exporting.

If you choose the Save As option in the File tab and also save the image as an .xcf file type, you can retrieve and work on the image later and make changes in the different layers. It

seems to me to be a good idea to also save an .xcf file.

So there you have it, a very good, basic beginners video introduction to Gimp. There are other You Tube videos you can find by searching for Gimp that will show you how to do specific things, such as rounding corners in a photo. If you've ever wanted to do photo editing, but hesitated because of the cost of Photoshop, this Gimp tutorial is just what you may need.  $\square$ 

President's Corner

### **Build a Wall?**

By Greg Skalka, President, Under the Computer Hood UG, CA February 2019 issue, Drive Light www.uchug.org President (at) uchug.org

Walls can keep things out. Walls can keep things in. Walls that do these well usually aren't so good at also letting some things pass from one side to the other.

Walls are meant to separate. You can't have separate things without some kind of boundary or barrier between them. Countries have borders that define the extent of their territories. Parcels of land have survey markers that define their boundaries. Our dwellings have their spaces defined by their walls, doors, windows, floors and roofs. Our bodies have skin and tissues that define what is within us and what is external to us.

Borders and boundaries can vary in permeability. Some need to be more porous, letting more things in or out. Others need to be more impenetrable, keeping most things out for protection or in for containment. In many cases a single barrier approach is not sufficient; a layered approach with many aspects to the boundary is more effective.

Our body's skin and hair help protect us, but they can't be too impenetrable, for without the ability to ingest food, expel wastes and exchange gases with the external world, we would quickly die. Our bodies must have a layered defense, with our immune systems helping to fight off infections that get past that initial outer boundary. We can also use technology to help, with clothing and sunscreen adding protection against solar radiation, for example. Our homes must follow similar border compromises, for while living behind blast doors in Cheyenne Mountain might provide great safety, we would lose easy contact with the outside world. Our home's windows let in desirable sunlight, but we must often draw the curtains to protect our privacy. Walls, while often essential, are seldom a one size fits all solution to boundary problems.

Our modern tech communication systems have given us the ability to easily exchange information instantly and at low cost with anyone on the planet. Unfortunately, we must erect barriers in these mediums to protect ourselves from offensive information and interactions, while still allowing us to send and receive the information we want. Just as in

the physical world we might like to build a wall to keep away someone that has violated our "personal space" and tries to talk to us from six inches away, we need walls in our electronic interactions to protect us.

Our oldest form of electronic communications that is still in common use is the telephone; it has been around since the late 1800's. In the early days, the cost to use it provided a barrier to misuse. While the recent modernization of the system and its lower costs have benefited the user greatly, undesirable use has also greatly increased as a result. In addition to scam calls, legitimate businesses often overuse the system as it has become a cheap way to advertise and to solicit customers. Today most of the calls I receive on my home phone and my cell phone are unwanted. While I do receive some useful calls, such as medical appointment reminders and notifications that my prescriptions are ready to pick up, most are calls to try to sell me solar panels, get me to refinance my home mortgage or solicit donations. Some are of criminal intent, trying to impersonate the IRS or some other entity, with hopes of convincing me to send them money. I've had to add technology and alter my behavior to try to wall these people out of my life.

For my home phone, an answering machine is an essential barrier in the communications chain. I don't have Caller ID, so unless I happen to be expecting an immediate call, I make it a practice never to answer when it rings. I allow all calls to go to the answering machine, which I use as a filter. Unless the calling party's message is compelling enough, I will simply delete the message. I think most scammers and many businesses are deterred by the answering machine barrier, as most calls I receive result in no message left. This wall seems to be working well, at least so far.

I also get unwanted calls on my smart phone, but here I have more layers of tech barriers to help. It has Caller ID, but the scammers can falsify the information transmitted about their identities, reducing its usefulness. My phone carrier is T-Mobile, which sometimes helps by identifying calling numbers as "Scam Likely."

I have done some phone programming to help me quickly identify those unknown callers trying to scale my tech walls. I have only added numbers to my phone's contact list that I truly wish to receive calls from. For each contact added, I have changed the ringtone for that contact to something other than the default for the phone. When my phone rings and I can't see the display (if it happens to be on the other side of the room), I can still tell that the caller is in my contact list, as it will ring with a ringtone that is different from the default. If it is the default ring, I know it is not one of my contacts and I don't need to get up to answer, as I'll just let it go to voice mail. Again, my border defense is multi-layered, with technology and my behavior helping to filter out the bad guys, while allowing me to easily communicate with those I like.

My smart phone also allows me to send and receive text messages, but I've yet to receive

any unwanted texts. If I do, I'll have to come up with some kind of tech barrier to counter those intrusions.

There was once a time when receiving a letter in the mail was a cause for excitement; now we mostly receive junk mail and bills. Of the roughly 40 years we have had email, the early years had that excitement. Unfortunately, as costs came down and connections proliferated over the globe, email communications became primarily electronic junk mail and scams. I keep trying to find ways to make email great again, but it has proved to be a daunting task. I can't seem to find the right kinds of walls and barriers, as it is much harder to separate the desired from the undesirable in this medium.

One of the problems with barriers for email is that they are often swamped by quantity. I typically receive 50 to 100 emails to my primary personal account per day. I might get a few of personal correspondence, maybe some financial alerts and notifications, a bunch of advertising that I am interested in, a bunch of legitimate ads that I'm not, some scammy stuff and a few really odd ones. Most of my email appears to be safe. I have had phishing emails from time to time - emails from banks I don't do business with (and a few that I do) asking me to click on a link. I've also received a few emails with suspicious attachments - who knows what malware they may contain.

Some email users swear by spam or junk filters. Some email providers have filtering capability, and there are also external spam filters that can be used. My provider does not provide filtering, my client (Thunderbird) appears to have some junk filtering but I've never tried it, and I'm not desperate enough so far to try external filters. I am skeptical of the effectiveness of email filtering programs. They may be able to filter off the very bad items, but I can usually spot those fairly easily anyway. My bigger concern is for items that I only want to see periodically, or that I have to investigate to see if I want. Sometimes I want to see the Fry's or Groupon emails, and sometimes I don't. I'm still looking for walls that work for my email needs; right now my walls are pretty low, and I do a fair amount of manual inspecting on what comes over.

The Internet is only about 35 years old and already has over half the people in the world using it. It and the World Wide Web allow people anywhere on the planet (and even in space, on the International Space Station) to get information and communicate with any of the other users. With this borderless medium, each user requires some boundaries be placed at the interface to their network for protection. An Ethernet router is the main line of defense, a wall between your network and the rest of the Internet. Making sure your router is configured correctly for maximum security will help block malicious intrusions into your network and computers, while allowing you to get the information you need. Setting up your Wi-Fi correctly is also an essential part of keeping your network safe and preventing the misuse of your internet connection.

In our electronic, interconnected world, boundaries are essential for keeping our communications secure and our personal data private, but just putting a wall around ourselves is not the answer. The barriers we use must be appropriate and configured for maximum protection with minimum restriction for the passage of desired data. A layered and evolving defense will usually be the most practical and have the most success.

Go to Page 1

### **CES 2019**

By George Harding Tucson Computer Society January 21, 2019

There were 180,000 attendees, 4500 vendors and some 500 qualified press.

Press events: Unveiled (150 vendors), Digital Experience (250 vendors), ShowStoppers (200 vendors), press conferences all day Monday.

Notable items: More IoT and AI, plus 5G, 4K and OLED, autonomous cars, VR and AR (VR means "Virtual Reality". AR means "Augmented Reality.)
The Internet of Things (IoT) is several years old now and has been used to allow operation of one or more devices remotely with one controller, usually a smartphone. Ex., lights, thermostat, garage door, etc.

Now IoT has been widely expanded to allow remote control of all devices with one controller. The goal appears to be to hook everything to everything else.

Artificial Intelligence (AI) is the use of computer programs to decide to take specific actions when defined circumstances occur, i.e. to cause apparently intelligent actions One device that is a combination of AI and IoT is Footloose, a cat waste disposal device. But it's more than that. It also analyzes the waste to identify possible illness, dispose of the waste hygienically, checks cat's weight how often it uses the device, how long it spends there and how much it leaves behind. It can identify multiple cats (if you have more than one). It's also self-cleaning and odorless, using NASA technology. There's also a smartphone app.



Another example is a food-ordering system, perhaps set up in a public place, like an apartment lobby. You select your choices and the food is delivered into your cubicle. Again, a smartphone app is part of the system.



Al has tremendous potential and has already been used by many companies to speed up business operations.

The 60 Minutes program last Sunday talked with a Chinese entrepreneur investing in Al startups. They have 140 of them so far, 10 being worth \$1 billion already. He says "Intelligence" is a misnomer, since these programs cannot think like a human and will never be able to do what humans can do.

5G is the latest generation of cellular mobile communications. It brings higher data rates, lower latency, higher system capacity and massive device connectivity (per Wikipedia). It is expected to allow much faster cellphone service, and much broader coverage. AT&T, Sprint and Verizon have already demonstrated 5G in limited locations. General availability is expected in 2020.

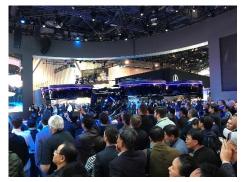
TV innovation is slowing, leading to ubiquitous inclusion of 4K and OLED. There is 8K on the horizon, but little is the way of source material.

Organic Light Emitting Diode (OLED) is created with a film of organic compound that emits light in response to electric current. This technology provides excellent color response, referred to as HDR, with blacker blacks and whiter whites. It also provides a much thinner TV unit, typically 3/4ths of an inch thick.

As usual, there were many car makers with their concept models. Autonomy is getting more widespread and the devices are being incorporated into the design, rather than strapped on top and side.



There was an autonomous VTOL helicopter from Bell.



Hyundai Elevate helps first responders access very difficult areas.



10

See video at <a href="https://youtu.be/A33Yu-9rgxo">https://youtu.be/A33Yu-9rgxo</a>

Drones continue to increase in ability and decrease in price. DJI is the leader in the industry currently. Their lowest price drones are Mavic and Spark





The rotors of the Mavic fold inward, making a very compact device to carry.

The increased speed of computer chips and the sophistication of devices has made VR more widespread, being used in companies for training, repair and more. AR is still not widespread.

Kodak showed a very small, compact projector, Luma, which can project to an 8-foot screen.



All in all, CES is a mammoth event that shows what is being provided today and will be provided tomorrow by companies that serve the consumer market.

CES is presented in early January each year. See their web site at <a href="https://www.ces.tech">www.ces.tech</a>
Go to Page 1

Dan's Desk

# **Encrypting a Drive**

By Dan Douglas, President Space Coast PCUG, FL March 2019 issue, The Space Coast PC Journal, www.scpcug.com datadan (at) msn.com

Last month I described a BIOS password problem that I had to solve. This month, we'll look at other password locks such as those used for protecting hard drive data.

One of the added features of Windows 10 Pro over the Home edition capabilities, is the ability to encrypt a drive to protect all data and files contained on that drive from unauthorized access. An administrator can select a drive from the File Explorer app and turn on the BitLocker option from the right mouse button option list. The user must then select an encryption key using any combination of uppercase and lowercase letters, numbers or symbols up to 64 characters long. It is critical to record this password as it will be impossible to access the files afterwards without this key. Windows will prompt you to save this key on your cloud account, or in a file or by printing it before encrypting the drive.

I recently had a customer who had a broken Surface PC and needed to recover some business files from the drive. The first place they'd taken it to had told them that it was not possible to access the data, not because it was encrypted, but because the drive was a solid-state circuit board, as is usually found in tablets and many Macs, and did not have the usual SATA drive connector. Having used many drives of this type before, I had the correct adapter to convert it to a SATA type connector. That was when we discovered that it had been locked using BitLocker. It prompted us to enter the key and the owner had no idea what that key may be. I told them that without the key I could not access the data for them. They were advised to check all of their paperwork to see if it was recorded somewhere. Fortunately, when the PC was purchased, the BitLocker key was written on their bill of sale by BestBuy! When they returned later with the key, we were able to access the data and transfer the files to a USB stick.

If you need to encrypt just specific files or folders and not a complete drive, there are several alternatives available. For example, Word and Excel provides for the ability to protect a document by applying the 'protect document' option to the file through the Word or Excel options. Adobe Acrobat can also be used to protect PDF type files. In certain versions of Windows, namely Windows 10 Pro, Windows 7 Professional, Windows 7 Ultimate, Windows 7 Enterprise, Windows 8 Pro or Windows 8 Enterprise also come with an Encrypting File System (EFS), which lets you encrypt any kind of file, as well as whole folders and subfolders. Users with a Home edition of Windows will need to use either the Office Suite encryption or a third-party solution, such as TrueCrypt, VeraCrypt or 7-Zip. EFS is applied by selecting the folder or file, select the properties/ advanced through a right button click, and then select the 'encrypt contents to secure data' option. This encryption is applied using the logon ID and password so it is not as secure as that used by the BitLocker and I'm not sure what would happen if the password used by that ID was removed using a password removal tool. Possibly the data would stay encrypted and still require the original password to allow the files/ directories to be accessed.

Many USB drives also offer their own encryption system for the files on that drive, but I would be hesitant to use these as the proprietary nature of the program may cause problems later.

Go to Page 1

# **Special Interest Groups (SIGs)**

Most SIGs will meet at Edina Executive Plaza, Conference Room #102, 5200 Willson Road, Edina, MN
Confirm with a SIG group if they meet elsewhere.
For more info contact the SIG Leader(s) listed here.

w Work phone h Home phone c Cell phone \* Meets at an alternate location

Get SIG announcements! Link from www.tcpc.com

#### **Board of Directors\***

All members are welcome! Check www.tcpc.com for location.
Selected Saturday mornings

#### Linux on Saturday

This is for the Linux newbie and those trying to come over from Microsoft to a different operating system.

Second Saturday @ 9 AM-Noon Note: No Meetings June-August

Jack Ungerleider

612/418-3494 c jack@jacku.com

#### **Tech Topics**

Technical presentation/discussion on various technical topics from the following

- Web/Internet
- Mobile Devices and Apps
- Playing with Programming
- DIY (3D Printing, R-Pi, other hobby electronics, etc.)

Second Tuesday @ 6:00-7:00 PM Every month Right before the general meeting.

Jack Ungerleider

612/418-3494 c jack@jacku.com

#### **Microsoft Access**

All levels. Presentations by expert developers within the group and by MS reps.

Third Saturday 9:00 AM—Noon

Note: No Meetings June-August

Steve Kuhlmey 952/934-8492 skuhlmey@hotmail.com

#### **Microsoft Office**

Addresses the use, integration, and nuances of the Microsoft Office applications.

Combined with Systems on Saturday
Third Saturday of the Month
9:00 AM—Noon

**Note: No Meetings June-August** 

Steve Kuhlmey 952/934-8492 skuhlmey@hotmail.com

#### Directions to Summit Place for General Meetings:

Proceed to Eden Prairie Center Flying Cloud Drive . [Flying Cloud Drive runs along the West side of the Eden Prairie Center.] Once you have driven past Eden Prairie Center (on the left) along Flying Cloud Drive you will come to a stop light at Prairie Center Drive. The next intersection with a stop light and left turn lane is Fountain Place. Turn left at Fountain Place and go straight into the parking lot. Turn left again to the first covered entry way of Summit Place. There is plenty of parking in the large parking lot in front of the first Summit Place covered entry way. When you enter the door at the first covered entry way, ask to be directed to the Performance Room for the TC/PC meeting. For a map of more detailed directions and *info on Web SIG and Board meeting*, check the TC/PC website.

Directions to Edina Executive Plaza for Systems on Saturday, Access, Word and Picture Perfect SIGs: Take Highway 100 to the 50th Street/Vernon exit. [If you have come from the north, cross back over Highway 100 to the east side.] Take the first right and go past Perkins [The golf course will be on your left.] and continue on the east frontage road (Willson Road) to the next building—5200. There is ample parking in the building's lot.

Conference Room #102 is on 1st floor.

# Help yourself by helping others!

Join the team & share your knowledge with others.

Contact TC/PC at www.tcpc.com

Meetings start at 7:00 PM (9:00 AM on Saturday) unless otherwise noted. \*Meets at Edina Executive Plaza.

April

Mav

Sun	Mon	TUES	WED	Thu	Fri	SAT
			1	2	3	4
5	6	7	8	9	10	11 Linux on Sat- urday 9 AM—Noon
12	13	14 General Meeting Combining Photos 6PM Tech Topics	15	16	17	18 MS Office (including Access) 9 AM—Noon
19	20	21	22	23	24	25
26	27	28	29	30	31	1
2	3	4	5	6	7	8 Linux on Sat- urday 9 AM—Noon
9	10	11 General Meeting Annual Meeting & Pizza 6PM Tech Topics	12	13	14	MS Office (including Access) 9 AM—Noon
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					



# 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.)



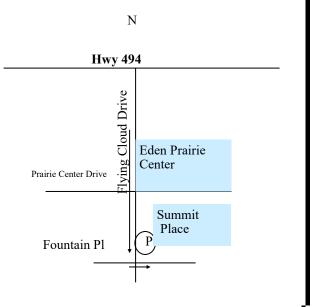
### 5/19 I'm signing up for: Here's the info for my TC/PC Membership: O Individual/Family Membership (\$18) O Business Membership (\$100) If an existing member your # Company name Make checks payable to: **Twin Cities PC User Group** 341 County Rd C2 W Roseville, MN 55113 State Zip http://www.tcpc.com OHome OBusiness OChange address: OPerm. OTemp. 'til \_\_\_\_\_ O Check # O Bill me Home phone\_\_\_\_\_ Work phone\_\_\_\_ O New member O Renewal O Prior member I'm interested in: Online address(es) O Training classes O Volunteering O Special Interest Groups: New User, Access, Where did you hear about TC/PC? \_\_\_\_\_ List here: O I DO NOT want any of my information disclosed. O I DO NOT want to receive any mailings Administrative Use Only Rec'd

May 14, 2019 General Meeting 7:00 PM

> CES 2019 Virtual Tours

Summit Place 8505 Flying Cloud Dr. Eden Prairie, MN 55344

More info and map: www.tcpc.com





FIRST CLASS MAIL