

Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and related technology. Our aim is to provide an exchange of information between users of digital devices. We are not in any way affiliated with any computer manufacturer or software company.

Program Meetings

No admission fee for non-members. Everyone is welcome! Second Tuesday of every month, except August, from 6:30pm – 8:30pm.

Help's Half Hour (Q & A)
 6:30pm – 7:00pm. *Members and Guests are welcome to attend and bring their computer related questions with them to get answered.*

7:00 – 7:15, Club Business

7:15 – 8:30+, Main Presentation

Come and join in the fun and enjoy a snack! **You are welcome to bring a guest.**

Become a Member

Go to our website, www.rcsi.org, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

The *Monitor* is published monthly by members of RCSI. Articles by our members may be reprinted by other user groups or nonprofits, without special permission, provided they are unaltered. A courtesy copy may be emailed to our author or Monitor editor.

The Rochester Computer Society, Inc. a computer/tech club open to everyone



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February 9, 'Internet Security/Privacy and Google Tracking' by Rob Truman, via Zoom

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**** Because of COVID-19, all club meetings and the ****
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Virtual Classes - are Real

By Phil Sorrentino, Contributing Writer
 Sun City Center Computer Club

That almost sounds like an oxymoron like “Jumbo Shrimp” or “deafening silence.” Well, the coronavirus has elevated teleconferencing to a level never seen before or maybe even ever expected. Almost everyone, by now, knows of Zoom and other computer Apps like GoToMeeting for teleconferencing. Zoom appears



"Your Computer User Group of the Air", Saturdays from 12:00 pm to 2:00 pm, with Nick Francesco, Dave Enright, and Steve Rae. Broadcasting on JAZZ 90.1 FM (WGMC) from Rochester, NY. Call 966-JAZZ (585-966-5299) or 800-790-0415

Sound Bytes is the longest running computer call-in show in the known universe.

We have stopped printing the Monitor newsletter and leaving hard copies at some area computer repair shops. Digital copies may be obtained from www.rcsi.org or my Pcloud storage at <https://tinyurl.com/tonydelrcsi> (this link works in PDF version only). Also includes presentation slides and articles too large for this newsletter.

Some Past Presentations:

Cut the Cord, Streaming Services
Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
Keeping Mobile Devices Secure
3D Printing, ENABLE project
Flash Drives-Not Just for Storage
Features, Mac OS X & Windows
Tablets, the Programs and Uses
Personal Finance Software
Amazing Browser Tips
Linux is Like Cars
Drones and Their Many Uses
Gifts and Gadgets for the Holidays

to have a lion's share of the business. If you're not quite sure what Zoom is, here is what Wikipedia says. "Zoom Video Communications, Inc is an American communications technology company. It provides video telephony and online chat services through a cloud-based peer-to-peer software platform and is used for teleconferencing, telecommuting, distance education, and social relations." For many of us, we can think of it just as an "easier to use" Skype. Two years ago, I did a presentation to a User Group on the West coast using Zoom (surprisingly not Skype). It was the first time I had heard of or used Zoom. Now Zoom has over 40% of the teleconferencing market. (Boy did I miss an investment opportunity. Zoom went public in March 2019 at \$36 and is now around \$250.)

Before the virus, teleconferencing was used mostly in the corporate world. But now everyone is familiar with it, from the seniors who are self-quarantining to avoid crowds, to elementary school students and teachers staying at home to avoid classrooms and crowded schools, to employees who are working from home to avoid the workplace gathering places like the coffee pot, the copier, and the water cooler.

Almost all of us are trying to avoid groups of people where the virus might easily be transferred. I recently needed to go to a shopping mall, and I was amazed to see how empty it was. We are staying away from gathering places. (Although the beaches do still seem to be pretty crowded.) So, now that we are not going out and gathering as much, we are staying home a lot more, which gives us a lot more time to learn new things. How many of us have taken up a new instrument or are learning a new language? Now's the time to learn how to play that guitar or keyboard you bought a few years ago. Well, language and instruments may be too much to expect but we probably can more easily learn about things we are involved in or are using daily, like our computer and our phone. And that is where virtual classes can be of some help.

Virtual classes are educational classes held remotely using teleconferencing software like Zoom or GoToMeeting, or others. With an in-person class, students and teachers gather in a classroom and interact there. With a Virtual class, we interact through our computer Clients (apps) which are then gathered together in a Server. (Remember Client-Server Technology?) Each of our computers is connected to the server via the Internet, and it is the Server software that provides the magic that lets us all share the Video and Audio from our client computer's cameras and microphones. The popular servers support many different clients. You can attend a virtual class using almost any device such as a Windows computer, an Apple computer or an iPhone or iPod, an Android phone or tablet, a Chromebook, or even a Linux computer. A reliable, fast Internet connection will greatly improve the experience. A wired connection to your router may be desirable, but not very common. Fortunately, modern wi-fi is typically more than adequate. (But unfortunately, not everyone has the latest wi-fi, especially if it is being supplied by the Internet Service Provider.)

Special Interest Group

Linux Sig

We are back!

Linux Workshop,
**third Saturday of
each month, Noon-4PM**



NEW LOCATION:

Gates Public Library
902 Elmgrove Rd, 14624,
between Buffalo Road and
531 Expressway.

The room we use is on the second
floor, SE corner, by the restrooms.

[https://www.meetup.com/
Interlock-Rochester-Hackerspace/
events/psggnqybcbxb/](https://www.meetup.com/Interlock-Rochester-Hackerspace/events/psggnqybcbxb/)

Because of coronavirus,

we meet online. A link will be sent
by email.

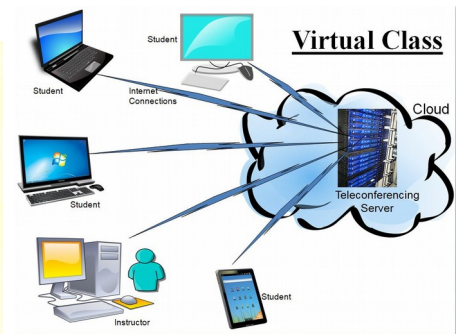
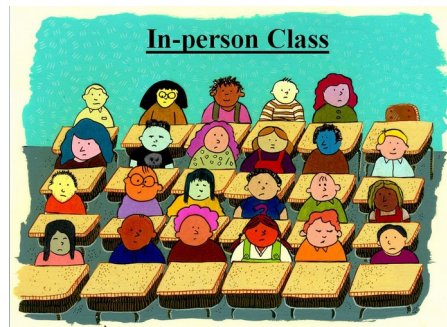
Come and get your questions about
Linux answered. We have experts
on hand to fix problems and
answer questions about Linux and
FOSS (free and open source
software). **Bring your system in**
so we can help you get the most
out of it. Hope to see you there.

Carl Schmidtman

**Free, Virtual Technology
Conferences, ONLINE**
presented by APCUG

The 2021 schedule
Saturdays:
February 13, May 1,
August 21, November 6
from 1 – 4 pm, EST

For Conference Descriptions
& Registration Links, go to
**[apcug2.org/category/
virtual-tech-conference](https://apcug2.org/category/virtual-tech-conference)**



The Internet connections to the server in the cloud allow us to interact “virtually” and avoid gathering together. The server “connects” each of us to each other. And the server presents a classroom presentation to each of us (the Users) so we can see who is participating in the virtual class. (There are controls on the Users screen that allow the Video and Audio, separately, to be turned on or off. The audio control is the “mute” control, mute turns the audio off, and un-mute turns the audio on. The video control is typically just Video on or off, though initially, it might show up as “join with Video”.)

The classroom presentation also has some different ways of showing the group of participants. Gallery view, as it is sometimes called, shows each of the participants (if their video is on) in a box on the screen. (If a Participant’s video is off, the box will just have the User Determined name.) The screen is divided among the number of participants, so as the number of participants gets larger it might be harder to determine who is in attendance, though each participant box does show the name. Another classroom presentation shows predominantly the person who is speaking with others shown in small boxes to the side or bottom, sometimes called “speaker view”. If there are a lot of speakers, this might be helpful, though if someone has a slow Internet connection, it might end up less helpful, due to the delay.

For any Virtual class, a very comprehensive PowerPoint presentation would be recommended, in general, to guide the class through the subject matter. Some classes readily lend themselves to the Virtual format. These are the “lecture” type of classes where there are no “hands-on exercises” to be undertaken. Demonstrations of hardware or software can mostly be accomplished using a “Share screen” feature that lets the instructor share the contents of his computer screen with all the participants. (Software on a particular device can be easily demonstrated by having that device as another class participant and allowing it to share its screen.) When the instructor does this, the instructor’s screen shows up on every participant’s screen.

So, it’s just like watching the big screen TV in front of the classroom, only everyone sees the teacher’s screen on their computer screen, at their location. A class like “Cut the Cord” works well as a virtual class because it is mostly lecture. Other classes, that are more interactive, may not lend themselves as easily. A class that

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Planning Meeting

Held on 1st Tuesday of each month
at 7 pm, at St. John's Meadows,
Briarwood building. ANY CLUB
MEMBER MAY ATTEND.
NOTE: Because of Covid-19, we
meet online, via Zoom.

Newsletter Printing

Limited copies will be printed and
available at some of the local
computer shops. *A few copies will
be available at our meetings.*

Club Mailing Address

Rochester Computer Society, Inc
PO Box 18516
Rochester, NY 14618

requires a lot of interaction may be difficult as a virtual class. This type of class may be more like a discussion group and maybe more dependent on having a definite agenda and a very strong moderator/instructor. Smaller class sizes may help this type of class be successful. The Special Interest Group on smartphones is an example of this type of class. All the participants of this class are encouraged to bring questions and ideas to the class for discussion, and it is anticipated that everyone will have an opportunity to speak. Questions from the class participants in any class are handled with either a "Chat" feature where the question can go to all participants or a specific participant or a "Raise Hand" feature that shows up on the screens to get the participant's attention.

Hopefully, this brief description (and time spent watching YouTube videos on the subject) will give you the courage to participate in a virtual class the next time an interesting one is offered.

Reprinted from the www.sccccomputerclub.org, philsorr@yahoo.com.

How the Internet Has Changed the Real Estate Industry

Speaker: Wade Huie, LACS, Realtor

Meeting review by Leah Clark

Los Angeles Computer Society Editor and President

Wade has been a real estate agent in Los Angeles since 2003. He talked about the days of 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 looking for "For Sale" signs, then they would call the agents listed on them.

The agents had all the information on properties for sale in Multiple Listings Services (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 home buyers 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 has been 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

Tidbits of probably useless information

Facts about Tails

Arctic fox:

Arctic fox has the biological name of *Vulpes lagopus*. To keep the body warm when they sleep, they will use the tail to wrap the body. It is functioned as a blanket for them.

Fish and marine animals:

Do you know the use of tails for the fish and marine animals? The tails are used for locomotion.

The land animals use their tails to swish away the insects and flies.

Balance:

The presence of a tail is very important in the life of an animal. Without a tail, it will be hard for the animals to keep their body in a balanced position. Do you know that kangaroos and cats use their tail for balancing the body? The prehensile tail comes in a number of shapes and sizes. The unique one is the prehensile tail, which can be found on the opossums and monkeys. The tail enables the animals to catch the tree branches.

Tail for social signaling:

Social signaling is also conducted by using the tails in some animals. This behavior is found on some deer. They will try to give the warning to other deer about the possible danger by flashing the white under the tail. Another animal, which also performs the same behavior, is the beaver. The tail will be slapped into the water to warn of danger.

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; 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. has been becoming 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.

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.

Taken from the October 2020 issue, User Friendly, www.lacspc.org,
editor@lacspc.org.

Nimrod’s Message

Editor: Cat Mews, AKA John Driscoll’s cat

He’s the President of The Central New York Technology User Group
April 2020 issue, Salt Bytes

Oh, now he tells me cats don’t get COVID-19. Do you know how hard it is to get a mask that fits me? And this “paw” washing ... you know cats don’t like water anyway. And, guess what, how do you think they take a cat’s temperature. It was bad enough using John’s thermometer.

Can’t say too much more though, I do get fed regularly and the stores don’t seem to have a “run” on “Sheba” kitty delight cat treats. Oh yea, kitties don’t use litter box “paper” either.

I have to say one thing. Sometimes it’s nice to just cuddle up and take advantage of the amount of heat our humans radiate. And, you know, things get cleaned up a lot more.

John’s been down in the basement quite often doing loads of wash.

I even get to go out on the porch once in a while. Not too far from the sliding glass door though, remember to stay between the human and the door. Don’t want to get locked out by accident. I hear it’s pretty tough in the wild.



From the April 2020 issue of Salt Bytes.

Jere's Tech Tips

By Jere Minich, Apcug Advisor,
Region 5 (AL, FL, GA, SC)

4 FREE WAYS TO RUN ANDROID APPS ON YOUR PC

– Want to use Android apps on a PC? There are plenty of good, free ways to emulate Android right on your computer, including the Your Phone app, BlueStacks, Genymotion, and Android-x86.

Ever wish you could run an Android app or game on your PC so you weren't relegated to a tiny phone screen? Or maybe you need to test a feature on Android, but don't have an Android device handy. Here are four free ways to run Android (and its apps) on your computer.

Go to this PC Magazine article and run Android Apps on your Windows PC.

<https://bit.ly/32cpCkw>

HOW TO USE A SMARTPHONE APP TO FIND YOUR CAR

– If you can never remember where you parked your car, check out these apps to keep track.

Having trouble remembering where you parked your car? With the right smartphone app, you can mark where you parked your car and quickly locate it again.

Google Maps allows you to record the location of your car; iPhone users with CarPlay or Bluetooth in their vehicles can also use Apple Maps. Or find a variety of apps across app stores by searching “find my car.” Let's check them out.

Go to this PC Magazine article and find your car.

<https://bit.ly/32gdwHj>

LINUX SIG

You guessed it. The library is closed, so Carl sent out a link in April to try an online meeting, using Jitsi. You might not get the total hands on approach, but you can ask questions and share screens during the meeting. The Linux Workshop will take place, **third Saturday of each month**, from Noon-4PM. No, you can't bring your machine in, but you can describe your problem and Carl and the other Linux gurus will try and help you. This is a video conference, so dress appropriately.

If you are not on the Linux emailing list, you can request a link to the workshop by contacting Carl Schmidtman, at

unixgeek@faultline.com.

Check with Carl, he might take a break during the holiday season.

* * * * * SOFTWARE and HARDWARE * * * * *

Transferring and Preserving Photos

By Dan Douglas, President
Space Coast PCUG, FL

Transferring and preserving photos is probably the single most common activity that practically all of us perform. Let's break this into two parts – A) the actual transfer of the picture files; B) how to store them.

A) The source of pictures can be varied, although I'm sure the most common today is via Smart Phone. The most common way to transfer pictures from a phone is to use a direct USB cable connection. The phone usually appears as a storage drive to the Windows file explorer and allows you to identify those files that need to be manipulated (copied/moved/deleted/edited/ etc.) as you would with any file stored on any of your storage drives. They may also come from an actual camera using a storage card or even through a direct WiFi connection that is available on some models. Of course, pictures may also originate as email attachments or as downloads from web sites. Some of these allow direct transfer to a directory/library/folder located on your local PC.

B) By default, Windows 10 creates a folder called Pictures for each user account on a PC. This allows each user to maintain their library of files separate from other users on the same PC.

As with any collection of files, you want to think about how to organize them into sub-folders to allow for easy access later. The fact that picture files from phones and cameras will have additional information stored internally, such as the date and place the picture was taken, which will allow for ease of searching and categorizing later. This information is stored as part of the picture file as an Exchangeable image file format for digital still cameras (EXIF) standards. The storage can be on whatever is convenient and appropriate for what you want to do with them.

So for ease of portability, a USB memory stick can be ideal – cheap and readable by practically any device with a USB port. An SD memory card is common in many cameras and the micro SD card is commonly used in

Scam Alerts

From the website:

<https://scambusters.org/scamlines.html>

Say No to *72

The scam: A terrible phone call to a Sioux Falls, SD, man tells him of a death in the family, asks him to call another number for details and to begin his cell phone call with the code *72. What this actually does is transfer all calls sent to the cell phone to the number the caller has given — the scammer's own number.

The scammer then gives your number to his buddies anywhere in the world and they can phone him via your cell, with you picking up the charges — and knowing nothing about it — until you get your bill.

The Not Guilty Juror

The scam: A new statewide warning in Utah this month of a familiar trick where individuals get calls telling them they failed to turn up for jury duty and asking for personal details so the court can cancel an arrest warrant. Meanwhile, in Winston County, MS, scammers claim they are calling from the courts merely to confirm personal details for possible future jury duty.

The solution: Don't give personal details like credit card or Social Security numbers — courts never seek them over the phone. If in doubt, contact the court directly. And report the incident to the police.

many other types of devices, such as android phones and other recording devices. CDs and DVDs were quite common ways to backup pictures a few years ago, but they have fallen out of use due to accessibility, speed, capacity, longevity, and cost considerations.

Of course, the best way today to ensure that you can always access your pictures is to use one of the many cloud services, many of which are already tied to your phone and PC. Refer to the April 2020 journal for a complete discussion of cloud storage options.

If you have suggestions for topics that you would like to see explained, please let me know!

From the May 2020 issue, The Space Coast PC Journal,
www.scpcug.org , datadan@msn.com.

[ZAP!] Try This Near-Perfect Spam Filter

By Bob Rankin, www.askbobrankin.com
a Translator for the Technology Impaired

According to researchers, it is estimated that about 54 percent of all email traffic is spam. But I rarely see any spam in my inbox. That's because Gmail blocks 99.9 percent of all spam, phishing and malware emails. Read on to learn how you can get near-perfect spam filtering, even if you don't use Gmail.

According to Statista, a global research firm that provides market and consumer data, [the ratio of legit emails to spam is improving](#). In the beginning of 2012, spam accounted for almost 70 percent of all emails. Today, that number has decreased significantly, but not enough. One factor in that decline is machine learning, an application of artificial intelligence, which has been part of Gmail's spam filter program since its inception.

Every time a user clicks the "Report Spam" or "Not Spam" button on a message, Gmail learns something that helps it filter spam better. But Google is also using technology to help Gmail learn on its own, without the user's clicks.

The Gmail spam filter uses an artificial neural network (ANN) that can detect and block the "especially sneaky" spam that sometimes slips past users' radar. What's an "artificial neural network," you ask? The oversimplified answer is, a lot of computers connected to each other in an attempt to simulate the interconnections of human brain cells. It's expensive to build an artificial neural network; most are tiny, with 1 to 10 million connections.

Google has built an ANN with over one billion connections using the processors in its vast and far-flung empire of data centers. That sounds awesome, until you learn that the human brain contains several trillion connections! None the less, Google's ANN is capable of rudimentary human-like self-learning. That means you don't have to teach it what spam is.

In one experiment, Google's ANN was fed millions of still images of cats culled from YouTube videos. The images were not labeled as "cats" and programmers did not tell the ANN what a "cat" is. The ANN figured it out for itself, learning to recognize cats in virtually any image. If it

Some Interesting Websites and Internet Finds

By Steve Costello
scostello@sefcug.com

The Ultimate Guide To Privacy On Android

<https://www.computerworld.com/article/3545530/ultimate-guide-to-privacy-on-android.html>

If you are an Android user, like me, you should check out this post. About every six months, or so, I run checks on most of the items outlined here. I use a paid VPN whenever I am not using my home Wi-Fi, and I encourage others to do the same.

Why Am I Connected To Wi-Fi But Not The Internet?

<https://www.howtogeek.com/676918/why-am-i-connected-to-wi-fi-but-not-the-internet/>

I am sure that at one time or another you have shown to be connected to Wi-Fi but not connected to the Internet. If you would like to know more about why that happens and what might be a solution, check out this post.

Vivaldi Browser Tips And Tricks

<https://www.thewindowsclub.com/vivaldi-browser-tips-and-tricks/>

I have been using Vivaldi (on both Windows 10 and Linux) off and on for a few months now, and I like it. This post gives some tips and tricks, that should make using it a better experience.

can do that, it can recognize spam with greater accuracy than most humans can. In 2019, Google announced that thanks to their machine learning framework known as TensorFlow, they are able to block an additional 100 million spam messages daily. Especially if they have anything to do cats, I presume.

But the ANN is still not perfect. Just as humans see UFOs in pictures of streetlights, Google's ANN sometimes sees spam in legitimate messages and mistakenly consigns them to the spam folder. Google claims that only about 0.01 percent (1 in 10,000) of legitimate emails are falsely labeled as spam these days. As the ANN learns more about email, that figure should fall even further.

Take a look in your Gmail spam folder, and see how it's working. If you do find certain messages are being incorrectly flagged as spam, you can create a Gmail filter for them, with a "Never send to Spam" action, so they'll be delivered to your inbox.

On the flip side, occasionally, I do get a batch of spammy messages that recur over a number of days. Recently I was getting several daily emails about investing in bitcoin. It was clearly spam, but perhaps because of other tech-related stuff that I do read, Gmail thought otherwise. I created a filter to send them to the Trash, problem solved.

How does Gmail's spam filter compare to other free Webmail services, such as Microsoft's Outlook.com and Yahoo? I haven't been able to find any independent, rigorous studies of this question. I'll just note that Yahoo seems rather overzealous about spam filtering, and quite a few of my outgoing messages to Yahoo accounts end up wrongly labeled as spam, or just don't get delivered at all. If you have any relevant data on this, please do share.

Another spam-fighting technique that Gmail employs doesn't really tackle spam, in my opinion. Gmail attempts to learn individual users' reading preferences and filter out even legitimate mail that goes unread. The company gives the example of email newsletters. One user reads them assiduously while another just lets them pile up unread, or deletes them without reading. Why people don't just unsubscribe from newsletters is one of life's mysteries. Hopefully, Gmail can distinguish between legit opt-in email newsletters and the ones that just arrive without your consent.

Finally, Gmail is providing [help for legitimate, large-volume email publishers](#) whose communications are sometimes wrongly condemned as spam. The Gmail Postmaster Tools will help airlines, banks, credit card companies, and other well-known firms analyze the fate of their emails and improve their delivery and reading rates. That's a good thing, because more and more large companies are encouraging customers to receive their monthly statements by email, rather than paper copies in the mail.

Even if you don't use or like Gmail, you can still use it to filter spam. Here's one technique that some people use to "pre-filter" their incoming emails. Instead of providing your actual email address when asked, give out a Gmail address that you've created. Configure that Gmail account to simply forward everything to your actual address. Gmail does spam-filtering

Penguin Platform

By “Free John” Kennedy, Apcug
Advisor, Regions 3 and 6/7

HOW TO USE THE STAT COMMAND ON LINUX – The

Linux stat command shows you much more detail than ls does. Take a peek behind the curtain with this informative and configurable utility. We'll show you how to use it.
stat Takes You Behind the Scenes

The ls command is great at what it does—and it does a lot—but with Linux, it seems that there's always a way to go deeper and see what lies beneath the surface. And often, it isn't just a case of lifting the edge of the carpet. You can rip up the floorboards and then dig a hole. You can peel Linux like an onion.

Read more with screenshots at this How-To Geek article.
<http://bit.ly/2RM3Gq6>

EVERYTHING YOU EVER WANTED TO KNOW ABOUT INODES ON LINUX – The

Linux file system relies on inodes. These vital pieces of the file system's inner workings are often misunderstood. Let's look at exactly what they are, and what they do.

Who deletes files? The elements of a file system, Inodes and file system size and more at this How-To Geek article.
<http://bit.ly/37rQ9ul>

BEFORE forwarding, so the messages that do get forwarded are virtually spam-free.

Gmail's spam filter is so reliable and accurate that I hardly ever check my spam filter for false positives anymore. I get hundreds of emails daily, and I rarely find myself clicking on the “Report Spam” button. The spam filter just works.

Printed from Bob's website at

https://askbobrankin.com/zap_try_this_nearperfect_spam_filter.html.

Windows FREE Snip and Sketch Tool is new and replacing the old

by Jim Cerny, Forums Coordinator

The new Windows “Snip and Sketch” tool was part of the Windows 10 October 2018 update. This tool is intended to REPLACE the old “Snipping Tool” of previous Windows editions. But they (Microsoft) did something to actually help us users this time – they kept the old tool! So you can play and learn the new Snip and Sketch and keep the old Snipping Tool too! Maybe they learned not to force users into using updated or changed apps right away – we need time to adjust and learn, right? Everything you could do in the old Snipping Tool you can do in Snip and Sketch, plus you get a few more tools and options. Thankfully these new additions are easy to see and use, and they can be ignored if you do not want to use them. Microsoft promises more options to come. Be sure to search Google for videos on how to use Windows Snip and Sketch! I am including here only the basic options. Click on the Windows logo in the lower-left corner of your desktop and you will find Snip and Sketch in the alphabetical list of apps that appear. It is not inside the Windows Accessories folder of apps (where the Snipping Tool still remains). I recommend dragging this app to your desktop screen to always keep it handy. But you can also open it anytime by holding down the Windows key + Shift key + S on your keyboard. Upon opening the app, your whole screen goes gray and you will see the small controls rectangle at the top. Here you select HOW you want to select what you want to snip or capture. From left to right you can select a rectangular area, freeform selection, the entire window, or your full screen. If you select the rectangle, you drag your mouse on the screen to select whatever you want. As soon as you release your mouse – presto, your selected image has been captured and saved on the clipboard to do with whatever you want! You can open a Word document for example, place your cursor where you want, and “paste” your clip right into your document. Or you can open the Windows Paint app and you can “paste” it there if you want to do more editing. At the same time that your snip is placed on the clipboard, you will also see a message stating that you can edit, draw, or markup your selection. Click to do that and Snip and Sketch opens in its own window with its own menu of options. Various easy marking tools are available for you to play with and try. There are highlighters and markers, and clicking on the down arrows will open things like color choices, etc. Once you have “sketched” on your “snip”

*** * Jokes Stolen from Everywhere * ***

"Star Trek Lost Episodes" transcript.

Picard: "Mr. LaForge, have you had any success with your attempts at finding a weakness in the Borg? And Mr. Data, have you been able to access their command pathways?"

Geordi: "Yes, Captain. In fact, we found the answer by searching through our archives on late Twentieth-century computing technology."

Geordi presses a key, and a logo appears on the computer screen.

Riker looks puzzled. "What the hell is 'Microsoft'?"

Data turns to answer. "Allow me to explain. We will send this program, for some reason called 'Windows', through the Borg command pathways. Once inside their root command unit, it will begin consuming system resources at an unstoppable rate."

Picard: "But the Borg have the ability to adapt. Won't they alter their processing systems to increase their storage capacity?"

Data: "Yes, Captain. But when 'Windows' detects this, it creates a new version of itself known as an 'upgrade'. The use of resources increases exponentially with each iteration. The Borg will not be able to adapt quickly enough. Eventually all of their processing ability will be taken over and none will be available for their normal operational functions."

Picard: "Excellent work. This is even better than that 'unsolvable geometric shape' idea."

you can save it as a ".jpg", ".png", or ".gif" format by clicking on the old floppy disk save icon and selecting the file type you want. The new Snip and Sketch is easy to use and very helpful for saving and sketching on any image on your screen for any purpose. Why not give it a try?

From the December 2019 issue, STUG Monitor, www.thestug.org, jimcerny123@gmail.com.

*** * * * * BITS and PIECES in the NEWS * * * * ***

Editor's Note: To continue reading the following articles, you may copy the long URL at the end of the article and enter it into a web browser or click on the URL in the web version of this newsletter.

Google Uncovers iPhone Exploit That Can Steal Data Over Wi-Fi

By [Ryan Whitwam](#) on December 3, 2020

Apple liked to talk a big game when it comes to security on the iPhone, but it's as vulnerable as any other company to unforeseen bugs. Sometimes, these bugs are minor and easy to fix with public disclosure. Other times, the bugs are a threat to user data and need to be patched in secret. That's the case for a recent update that fixed a major Wi-Fi exploit. [According to Ian Beer of Google's Project Zero security team](#), the flaw allowed him to steal photos from any iPhone just by pointing a Wi-Fi antenna at it.

According to Beer, he discovered the flaw earlier this year and spent six months developing an exploit around it. The attack uses a buffer overflow bug in AWDL, which is Apple's custom mesh networking protocol that allows iPhones, iPads, Apple Watches, and Macs to form ad-hoc wireless connections. This is a core part of the iOS and macOS software stack, so exploiting it gave Beer access to all the phone's data.

Beer posted a full rundown of the hack on the Project Zero blog, which he can do because the flaw was reported to Apple early in 2020, allowing the iPhone maker to roll out patches in May to block the attack. The write up is exhaustively detailed, clocking in at 30,000 words. There's also a video demo below, which won't take quite so long to digest. [*go to website to view*]

<https://www.extremetech.com/mobile/317968-google-uncovers-iphone-exploit-that-can-steal-data-over-wi-fi>.

DNA nanobots build themselves: How can we help them grow the right way?

by Isabelle Dubach, [University of New South Wales](#)

UNSW researchers have overcome a major design challenge on the path to controlling the dimensions of so-called DNA nanobots—structures that assemble themselves from DNA components.

Odds and Ends

History of Computers: A Brief Timeline

By [Kim Ann Zimmermann - Live Science Contributor](#)

1993: The Pentium microprocessor advances the use of graphics and music on PCs.

1994: PCs become gaming machines as "Command & Conquer," "Alone in the Dark 2," "Theme Park," "Magic Carpet," "Descent" and "Little Big Adventure" are among the games to hit the market.

1996: Sergey Brin and Larry Page develop the Google search engine at Stanford University.

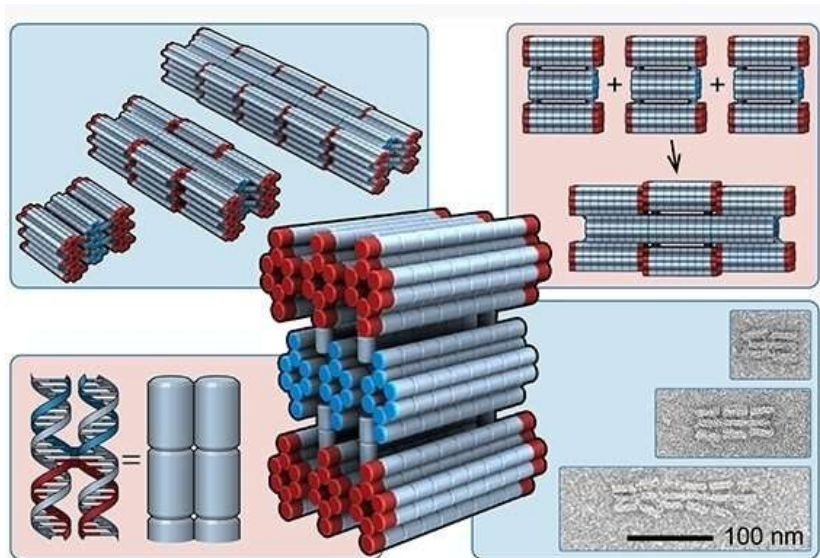
1997: Microsoft invests \$150 million in Apple, which was struggling at the time, ending Apple's court case against Microsoft in which it alleged that Microsoft copied the "look and feel" of its operating system.

1999: The term Wi-Fi becomes part of the computing language and users begin connecting to the Internet without wires.

2001: Apple unveils the Mac OS X operating system, which provides protected memory architecture and pre-emptive multi-tasking, among other benefits. Not to be outdone, Microsoft rolls out Windows XP, which has a significantly redesigned GUI.

2003: The first 64-bit processor, AMD's Athlon 64, becomes available to the consumer market.

2004: Mozilla's Firefox 1.0 challenges Microsoft's Internet Explorer, the dominant Web browser. Facebook, a social networking site, launches.



Self-assembling nanorobots may sound like science fiction, but new research in DNA nanotechnology has brought them a step closer to reality. Future nanobot use cases won't just play out on the tiny scale, but include larger applications in the health and [medical field](#), such as wound healing and unclogging of arteries.

Researchers from UNSW, with colleagues in the UK, have published a new design theory in *ACS Nano* on how to control the length of self-assembling nanobots in the absence of a mould, or template.

"Traditionally we build structures by manually assembling components into the desired end product. That works quite well and easily if the parts are large, but as you go smaller and smaller, it becomes harder to do this," says lead author Dr. Lawrence Lee of UNSW Medicine's Single Molecule Science.

Medical researchers are already able to build nano-scale robots that can be programmed to do very small tasks, like position tiny electrical components or deliver drugs to cancer cells. At UNSW, researchers use biological molecules—like DNA—to build these nanorobots. In a process called molecular self-assembly, tiny individual component parts build themselves into larger structures. The challenge with using self-assembly to build is figuring out how to program the building blocks to build the desired structure, and getting them to stop when the structure is long or tall enough.

Read the whole article at <https://phys.org/news/2020-12-dna-nanobots.html>.

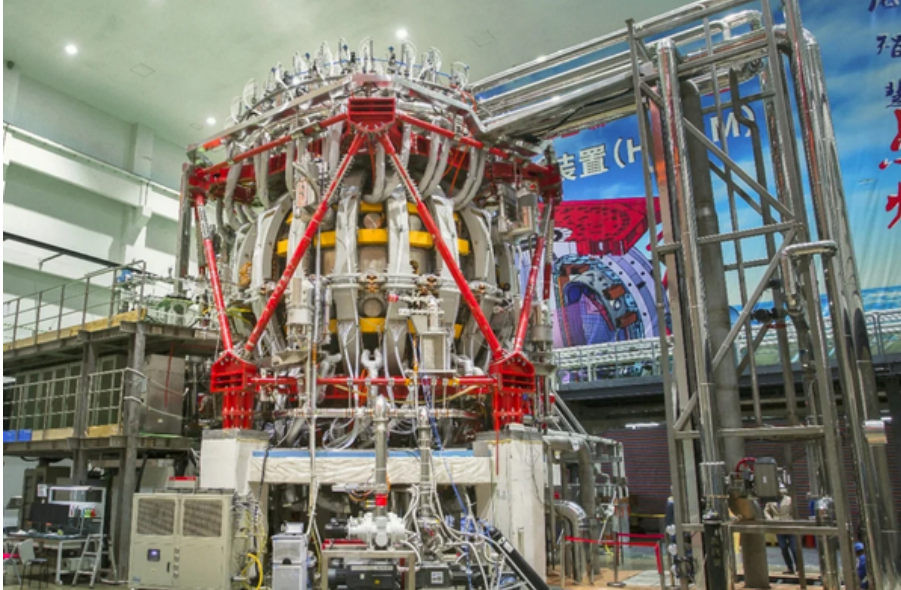
Data Privacy Day (Jan. 28, 2021) is less than two months away! Join the National Cyber Security Alliance on Tuesday, December 15 at 2pm EST/11am PST to learn about how you and your organization can get involved and create awareness about the importance of privacy and protecting personal information!

China Just Switched on Its 'Artificial Sun' Nuclear Fusion Reactor

7 DECEMBER 2020

China successfully powered up its "artificial sun" nuclear fusion reactor for the first time, state media reported Friday, marking a great advance in the country's nuclear power research capabilities.

The HL-2M Tokamak reactor is China's largest and most advanced nuclear fusion experimental research device, and scientists hope that the device can potentially unlock a powerful clean energy source. It uses a powerful magnetic field to fuse hot plasma and can reach temperatures of over 150 million degrees Celsius, [according to the People's Daily](#) - approximately 10 times hotter than the core of the sun.



China's 'artificial sun', HL-2M Tokamak. (China Atomic Energy Authority)

Located in southwestern Sichuan province and completed late last year, the reactor is often called an "artificial sun" on account of the enormous heat and power it produces.

"The development of nuclear fusion energy is not only a way to solve China's strategic energy needs, but also has great significance for the future sustainable development of China's energy and national economy," said the People's Daily.

Chinese scientists have been [working on](#) developing smaller versions of the nuclear fusion reactor since 2006. They plan to use the device in collaboration

with scientists working on the [International Thermonuclear Experimental Reactor](#) - the world's largest nuclear fusion research project based in France, which is expected to be completed in 2025.

Fusion is considered the 'Holy Grail' of energy and is what powers our sun. It merges atomic nuclei to create massive amounts of energy - the opposite of the fission process used in atomic weapons and nuclear power plants, which splits them into fragments. Unlike fission, fusion emits no greenhouse gases and carries less risk of accidents or the theft of atomic material. But achieving fusion is both extremely difficult and prohibitively expensive, with the total cost of ITER estimated at US\$22.5 billion.

From the website www.sciencealert.com/china-just-powered-up-its-artificial-sun-nuclear-fusion-reactor.

***** CLUB and REGIONAL NEWS *****

RIT Professor Seth Hubbard receives DOE grant to develop low-cost, high-efficiency solar cells

Research focuses on making the substrates that solar cells are grown on reusable

A Rochester Institute of Technology professor received a grant from the Department of Energy to research ways to develop low-cost, high-efficiency solar cells. Professor [Seth Hubbard](#) received nearly \$400,000 from the DOE to attempt to dramatically reduce the cost of high-efficiency solar cells by using a process called spalling to make the substrates solar cells are grown on reusable.

“One of the issues with solar cells is you can make them cheaply but they’re not as efficient and thus they don’t produce as much power. Or you can spend more money to create solar cells that are more efficient,” said Hubbard. “The most efficient type of solar cells, and unfortunately the most expensive, are used in space for satellites because the cost is less important in that environment. In this project, we’d like to bring these cells down to earth at a reasonable cost.”

Gabrielle Plucknette-DeVito,
Professor Seth Hubbard, right.

Finish article at
www.rit.edu/news/rit-professor-seth-hubbard-receives-doe-grant-develop-low-cost-high-efficiency-solar-cells.



RCSI

No, we haven’t closed. Our usual meeting place has closed to outsiders, but **we are practicing ‘social distancing’ online**. We have used Zoom for several of our planning meetings. These meetings are held the first Tuesday of each month, at 7:00 pm and are open to any member. A link will be emailed to members, before our next planning meeting. **ANY CLUB MEMBER MAY ATTEND** and voice their opinions about club operations.

We have already completed several general online meetings, with a few hiccups while showing videos. The next online presentation will have been presented before this newsletter is sent out. So, we are working out the bugs.

Help’s Half Hour

Notes by Jan Rothfuss

Q: Is there a Zoom option to adjust the light intensity, etc?

A: There seems to be an adjustment for low light but it does not seem to make a difference.

Q: Mark sent along a link that can be used to update Windows 7.

A: https://www.majorgeeks.com/files/details/simplix_updatepack.html

Q: Which Zoom-like software uses the least resources.

A: Nothing will run well if your Internet provider’s service is weak.

You can also look into a directional wi-fi capturing piece/antenna that will allow you to pick up a stronger signal.

APCUG

APCUG is pleased to announce that we will be having online workshops during the fall and winter seasons. The schedule can be checked at <https://apcug2.org/workshops/>



Online During Covid

Our Usual Meeting Place

St John’s Meadows at

Johnsarbor Drive, is on the left, past Clinton Avenue, when going West on Elmwood Avenue. The opening in the white fence is Johnsarbor Drive. At the ‘T’, turn right. The meeting is in the first building on the left – **Briarwood.**

Our meeting place can change. Please check our website before each meeting. **www.rcsi.org**