



### 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](http://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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Tuesday, January 14, Video Night  
Life Saving Devices, Inventions From the Past  
presented by Tony Dellelo

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### President's Corner

## Security is Important - Why Does it Take So Long (and Cost So Much)?

By Greg Skalka, President  
Under the Computer Hood User Group, CA

I am a technology user. I use all sorts of tech products, applications and services. I have laptops, desktops and Chromebooks. I have mobile devices - smart phones and tablets. I have home Internet access and I access the web from other places as well. I have a home network and I have smart home devices (cameras, TVs, voice-controlled assistants, smart lights and appliances). I use lots of software. I search the web,



“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.

The RCSI '**Monitor**' newsletter can be found in some public libraries in Monroe County. *Free copies* can also be found in the following computer stores: Microworx, Just Solutions, TSC Electronics, and Pod Computers. Digital copies may be obtained from [www.rcsi.org](http://www.rcsi.org) or my **Pcloud** storage at <https://tinyurl.com/tonydelrcsi>. 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

bank and buy things online and send emails and texts. I'm not much for social networks, but I do appear in posts by others, especially my wife. I've got a lot of the things a typical middle-class American would have.

I use a lot of technology, but all I want to do is use it. I don't want to have to struggle to make it work, fix it or spend a lot of time and money keeping it working safely. I want it all to work every time as I expect it to work. Unfortunately, there is a lot more to our tech lives than that. None of the tech revolution we have seen in the last decades would have been possible without money. It is commerce, capital and the desire to make a profit that brought us most of this, including Microsoft, Google, Uber, Tesla and all the rest. Some key government investments in technology, in the space program, DARPA and the military-industrial complex, helped with fundamental research, but the capitalist entrepreneurs filled in the rest. Money made tech great, but money also made it unsafe.

Entrepreneurs take legal risks to gain rewards; criminals try to find the least risky ways to make money, legal or not. Each new tech device, app or service that comes out is studied for vulnerabilities by the criminal elements intent on exploiting it for monetary gain. Now that technology has interconnected the world, we can be the victims of crime originating from all over the globe. Even nation states can get in the game, trying to steal information for economic and political purposes.

All this leaves the poor tech user vulnerable. The rapid rate of change, the ease of use and ubiquitousness of these products and services just add to the risk. How does a user evaluate the threat and defend against it? Is it all worth the cost?

The criminals are out there, ready to hack, snoop, steal and deceive. They want your personal information to steal your identity and your passwords to steal your money. They want to trick you into sending them gift cards and Bitcoin. Who is going to protect the tech user from all the cyber threats? Can the government protect us? Laws may be passed, regulations put in place and enforcement attempted, but citizens are still victimized. Unfortunately sometimes the government is part of the problem, not protecting the sensitive data we entrusted to them.

Can the companies we buy products and services from protect us? Their desires for profit over all else have created some of our tech problems. They will sell us devices that are not secure if they think it makes business sense. They'll collect and monetize our personal information and then often fail to protect it adequately. It seems, we as tech users, must find ways to protect ourselves, as no one else will take responsibility for our security. Unfortunately, that means additional costs in terms of money and time are required to keep our assets (money, identity, personal safety) secure when using all these tech items and services in the new global digital electronic world.

There is no practical way to remain 100% secure in our modern connected world. Even if you turn off all of your devices, disconnect them, put them in a box and seal it up (and cancel all your related services), you are not safe. The government still has your personal information, and even if you are not on Facebook, others could post about you. You will have to go back to paying with cash, shopping and banking in physical locations and communicating through personal visits and

## Special Interest Group

### Linux Sig

[www.interlockroc.org](http://www.interlockroc.org)

**After a 10 year run, we are currently on hiatus, while looking for another location. Check the website to check our progress. Thank you.**



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.

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

2020 Schedule  
**Saturdays: Feb 8, May 2,  
Aug 15, Nov 7**  
from 1 – 4 pm, EST

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

letters. Unless you want to step back into the 1950's, you will have to adopt some additional safeguards with every new tech item you acquire.

Safety as a tech user is not an absolute, but a matter of degree. More time and money spent to safeguard our activities will provide more relative safety and security, but trade-offs will need to be made. More security comes at a higher cost and usually a greater inconvenience as well. A user can make their tech life more resistant to attacks by cyber criminals and become more resilient should bad things happen, but it will require more time, money and effort on their part. Lots of articles are written about protecting ourselves online and describing precautions we all should take, yet cybercrime is still prevalent.

I think I take care of my tech household pretty well, though there is always more that can be done. The things I value most (finances, identity, property) I protect the most, while things of a lesser consequence I am a bit looser with. In some ways I probably go overboard in caution, but there are probably some risks I don't take as seriously as I should. I'm pretty careful with physical security, using strong passwords, encryption, a VPN and two-factor authentication where appropriate.

I'm pretty resistant to social engineering threats and am very careful with my personal information. Exercising care and vigilance online is good, but it requires effort and some investments. I have several laptops and desktops that my wife and I use, as well as a couple of Chromebooks. All the computers we regularly use run Windows 7, so I am presently working towards replacing at least some of them with Windows 10 computers ahead of the Windows 7 security sunset in January 2020. This considerable cost in new hardware and software and in time to set everything up is strictly due to Microsoft's desire to make Windows 7 obsolete; I would be perfectly happy staying with Windows 7 otherwise. I'll be spending money on new systems, probably buying new software and spending time teaching my wife how to use the new OS. I'll probably compromise by keeping a couple of old Win7 computers or laptops to run software I can't convert to Win10 or don't want to spend more on. I still have a Windows XP computer that I keep off-line to run certain programs. I'm actually writing this article on it; I've yet to find a Microsoft Word version I like overall as much as version 6.

Even when security updates are provided for free, our time is usually required to oversee their installation. If nothing else, the time required to install updates represents time we are unable to use our devices. While Windows 10 may force automatic security updates, they can wind up being applied at the most inopportune times. I don't mind as much the automatic updates my Chromebook gets from Google, as they are downloaded in the background and quickly applied on the next power-up.

In addition to computer updates, our network items often require security patches. Few users may pay much attention to updates for their routers, however, unless they are alerted somehow. I have a Netgear Orbi mesh Wi-Fi router, which I love for its performance and ease of use (but not so much for the initial cost). Because I'd registered the product and downloaded their app, I recently received an email that an update was available for my router's firmware. I initially tried to apply the update through the app (on my smart phone) but was unsuccessful. I was able to enter into an online chat through the app with their tech

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## Planning Meeting

Held on 1<sup>st</sup> Tuesday of each month  
at 7 pm, at St. John's Meadows,  
Briarwood building. ANY CLUB  
MEMBER MAY ATTEND.

## Newsletter Printing

The newsletter was printed at St  
John's/Chestnut Court by the  
printing group, with the help of  
Don Wilder (computer and printer  
operator). We will try and print on  
the 1<sup>st</sup> or 2<sup>nd</sup> Thursday morning  
following the monthly meeting.

support, and thus began a two-hour process to finally get my router system updated.

I assumed I would be able to easily update through the Orbi app, but the support tech told me my installed firmware version was too old, and I instead would need to download and install an intermediate version from a web link. I find the small screen of a phone too difficult to use for this kind of activity, so pulled out a Chromebook, logged into my Orbi router and went to the web link. This also allowed me to keep the support chat going separately through the app on my phone.

Once I got to the web link, I found I would be downloading a zip file. There may be ways to unzip on a Chromebook, but I don't know them, so I switched again and logged in with my Windows laptop. The support tech said to apply the update first to the satellites (my mesh system consists of one router and two satellite units) and then to the router. The update page was a bit confusing, and I inadvertently updated the router first. Fortunately I was still connected to the tech support person, so after a number of additional steps, I successfully updated all components.

It is almost time to renew my anti-virus, and I need to make some decisions about it. I've been using ESET Internet Security for many years and really like it (and think it protects me, but who really knows). I'm not sure what I should use going forward on Windows 10, as I've heard that Microsoft's Win10 built-in protections are as good as anything else, and obviously are at no extra cost. I always buy ESET on sale ahead of when I need it, so I already have new copies to put on my Win7 computers. That seems like a waste, as I won't have these computers on the Internet past January. Still, I shouldn't cut corners on protecting my online banking computer, at least until I am switched over completely to Windows 10.

Though I may be spending a lot of time and money getting my new computers set up, it hopefully will increase the odds that I'll have secure systems that will help protect my data.

From the October 2019 issue, Drive Light, [www.uchug.org](http://www.uchug.org),  
[president@uchug.org](mailto:president@uchug.org).

## Internet of Things Data Tracking

By Jeff Wilkinson, Present  
Sun City Summerlin Computer Club, NV

As I continue to delve into the ramifications of targeted marketing and how it might affect us in our everyday lives, I'm diverted to the Internet of Things (IoT). A little research on IoT and how data from seemingly innocuous devices could be collected and used, proved enlightening, with a tremendous amount being written on this subject.

How will this data flow through the various collection systems? Will data be captured in real time or transmitted in anonymous batches? How will it be used, and who will have access to the purportedly anonymous data sources? Devices supplying data could include fitness wearables, various accessories in cars, IoT equipped appliances, such as

## Tidbits of probably useless information

**Ancient Fingerprints** Show Men and Women Both Made Pottery in the American Southwest. Long thought to be primarily women's work, new analysis of ceramic fragments shows both sexes created pottery at Chaco Canyon.

It is impossible to lick your elbow.

The State with the highest percentage of people who walk to work: Alaska.

The percentage of Africa that is wilderness: 28%. The percentage of North America that is wilderness: 38%.

It is commonly held that 'Tom Sawyer', written by Samuel Clemens (a.k.a. Mark Twain), was the first novel to be written on a typewriter. Although it is hard to say definitely, it seems this is most likely incorrect. However, it is an understandable assumption to make, since Clemens himself made that claim in a letter written in 1904.

**The San Francisco cable car** system is the world's last manually operated cable car system. An icon of San Francisco, the cable car system forms part of the intermodal urban transport network operated by the San Francisco Municipal Railway. Of the 23 lines established between 1873 and 1890, only three remain: two routes from downtown near Union Square to Fisherman's Wharf, and a third route along California Street.

refrigerators, washers, dryers, health trackers, Smart TV's, security cameras and devices, web connected eyeglasses, and the list goes on.

Table 1: IoT Units Installed Base by Category (Millions of Units)

Category	2016	2017	2018	2020
Consumer	3,963.0	5,244.3	7,036.3	12,863.0
Business: Cross-Industry	1,102.1	1,501.0	2,132.6	4,381.4
Business: Vertical-Specific	1,316.6	1,635.4	2,027.7	3,171.0
<b>Grand Total</b>	<b>6,381.8</b>	<b>8,380.6</b>	<b>11,196.6</b>	<b>20,415.4</b>

Source: Gartner (January 2017)

IoT devices will outnumber the world's population this year for the first time.

A recent study indicated that over half of those surveyed would be willing to receive some ads.

This, of course, indicates that some form of data tracking is needed, not only of our computers and phones, but of the fitness monitors used to track our physical activity, the refrigerators monitoring our supply of milk, or the processor in our new car monitoring our driving!

Much of the data can be used for non-nefarious purposes, such as product improvement and future product development. But will some of this data be used to extrapolate future drug health care needs, based on current fitness monitor feedback data? Will this data find its way into insurance actuarial tables? And, of course this data will be used for more fine grain targeted marketing. The management of this data has, in fact, spawned new companies who will monetize this valuable data. It will be another learning experience, as hopefully the public is able to decide what is acceptable and what is not.

On the plus side, IoT can help create Smart Homes and improve machine efficiency, such as heating and cooling devices. IoT can be used in wearables for security and identification, health monitoring and reporting, smart retail and inventory control, optimization of farming, and supply chain activities, to name a few.

Many positive things come out of the use of IoT data, such as Rolls Royce using this data, along with artificial intelligence (AI), to create business benefits to customers and improve their products. They have created "Data Innovation Cells" which use collected data to test new ideas to improve performance, maintenance cycles, and safety, and develop product improvements. It is certain that data from IoT connected devices will unlock efficiencies, spawn innovation, and lead to meaningful insights of all kinds!

So, the IoT is actually being used in numerous positive ways, and engineers are just beginning to see all the potential benefits. Of course, putting sensors and retrieving feedback from every process can result in an overabundance of data, which may or may not prove useful. While all of this can be viewed as an overwhelming invasion of privacy, it can also be looked at as an exciting step forward and a world full of new opportunities, with positive outcomes around every corner!

From the June 2019 issue, Gigabyte Gazette, [www.scs-cc.com](http://www.scs-cc.com), [pres.scscc@gmail.com](mailto:pres.scscc@gmail.com).

## Jere's Tech Tips

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

### HOW TO PROTECT YOUR IDENTITY ONLINE – Identity Theft Is Serious

Identity crimes include scenarios like a hacker who steals your credentials to break into your accounts or assume your financial identity, or someone thousands of miles away from you who runs up charges on your credit card and takes out loans in your name.

If you need something else to keep you awake, the FTC describes identity theft scenarios in which a thief gets a credit card in your name, sends the bill to another address, and (of course) never pays. Or he uses your personal information to steal your tax refund or pretends to be you if he's arrested.

Read more about ID Theft and ways to be safe at this How-To Geek web page:  
<http://bit.ly/2ngo0Ek>

### WHAT IS A GIF, AND HOW DO YOU USE THEM? – Even if you

can't define the word "GIF," you've definitely seen one before. They helped define the early internet, and they're more popular now than ever before. But what exactly is a GIF, and how do you use them? Find out more at this How-To Geek web page:  
<http://bit.ly/2lMRh9e>

### HOW TO USE FILE HISTORY TO BACK UP FILES ON

**WINDOWS 10** – File History in Windows 10 is the one feature you want to use to back up your personal files, and in this guide you get all the instructions on how to use it.

Go to this Pure Info Tech web page. <http://bit.ly/2kpRZsm>

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

Dan's Desk

## Encrypting a Drive

By Dan Douglas  
President Space Coast PCUG, FL

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 provide 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

## Programs recommended by our members

### Free Internet TV

#### Crackle

Sony's [Crackle](#) is an ad-supported streaming service, one that offers mostly movies, but also some TV shows -- including some original content. It's available on a wide variety of devices and doesn't even require you to set up an account, though doing so enables you to save favorites, get recommendations and resume playback if you switch between devices.

#### Pluto TV

A relative newcomer, [Pluto TV](#) is noteworthy for offering not only on-demand movies, but also live TV channels including [CBS News](#) and, ahem, CNET. It's ad-supported, of course, but definitely one of the best free-content options currently available.

#### Tubi TV

The name belies the content: [Tubi TV](#) offers considerably more movies than it does TV shows, but that's not to say you shouldn't check out its extensive library. Similar to Crackle, this ad-supported network is available on a wide variety of devices and doesn't require an account, though signing up for one enables you to save favorites and resume playback if you switch between devices.

#### Yahoo View

Although [Yahoo's streaming service](#) has a smattering of movies, the big focus is on TV shows. It has lots of them, thanks to a [partnership with Hulu](#), and you don't even need a Yahoo account to get in. Indeed, this is perhaps the most abundant source of free online TV.

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.

From the March 2019 issue, The Space Coast PC Journal,  
[www.scpcug.com](http://www.scpcug.com), [datadan@msn.com](mailto:datadan@msn.com).

## Cell Phone Collusion

by Jim Sanders, SIG Leader  
North Orange County Computer Club, CA

For several years, I have noticed a few ads for cell phones that said they included an FM radio. By that I mean the actual electronic hardware that allows the cell phone to be used as a transistor radio and tune in to the local, over the air, FM radio broadcasts. I regretted that it was never the phone that I had, nor one with the FM radio tuner feature, whose other features fell short of acceptable. For a long time I have thought that having the FM radio feature in my cell phone would be very nice. I could tune into my favorite music station without having to install some streaming Application. I would not have to worry about streaming music using up my online data allocation. With it, if I lost a cell phone tower connection, it wouldn't matter. And potentially, in any kind of an emergency, I might be able to receive an FM radio broadcast when there was no cell service available.

Having received an email that suggested I read an article in their electronic magazine, I opened it. After reading the article, I noticed in the "You might also be interested in" section of the page, an article titled: "Samsung enabled FM radio on US unlocked Galaxy S9 and S9+ with ...". The opposite of unlocked of course, is locked.

A long story as to why, but I recently signed up with AT&T for a special deal they were offering. To wit, buy one Galaxy S9 and get one free if you sign up with us for two years. As a rule, when you sign up with a carrier for that kind of contract your phone is "locked" to their service. To me, that implied that I have a Galaxy S9 phone that has an FM tuner that I can use. That thought made me happy, but at the same time, a little confused. The last time that I had looked at the specifications for a Galaxy S9 phone, FM radio tuner was NOT on the list. So I went to AT&T online support to ask about it. I searched for AT&T online help and got this URL:

<https://www.att.com/devicehowto/index.html#!/?make=Samsung&model=SamsungG965U>. The page title is: AT&T [Wireless Support](#), [Devices](#), [Samsung](#), Samsung Galaxy S9 / S9+.

When I got there, a line said: "How can we help you today?" I typed in "FM Radio."

The response was:

"We searched for 'FM Radio' in Device Support and didn't find anything." Per the instructions, I shortened it to just 'Radio', but got the same response. I tried multiple variations of the search, but the circle always came back to; we don't admit to knowing anything about FM radio.

## Some Interesting Websites and Internet Finds

by Steve Costello  
[scostello@sefcug.com](mailto:scostello@sefcug.com)

The Dumbest USB Gadgets You Can Buy  
<https://www.reviewgeek.com/5774/the-dumbest-usb-gadgets-you-can-buy/> This is not the kind of thing I usually share, but I just couldn't believe some of the things shown. Also, if they are for sale, I assume someone is dumb enough to buy one (not you or me, of course).

Here's What You Should Use Instead of CCleaner  
<https://www.howtogeek.com/361112/heres-what-you-should-use-instead-of-ccleaner/> I still use CCleaner, but others have concerns lately. For those who no longer use it, this post tells you what you should use instead.

Gmail For Mobile: Disable Conversation View?  
<https://www.askdaveytaylor.com/gmail-for-mobile-android-disable-conversation-view/> Did you know that you can disable conversation view on your mobile (Android only for now)? Dave explains what conversation view actually is, and how to disable it in Android Gmail.

What is Android Bootloader? A Complete Guide  
<https://joyofandroid.com/android-bootloader/> For those of you who like to know the inner workings of Android, this is a good guide to the bootloader.

OneDrive tips and tricks: How to master Microsoft's free cloud storage  
<https://www.zdnet.com/article/onedrive-tips-and-tricks-how-to-master-microsofts-free-cloud-storage/>

### I then clicked on the online chat function and got Steve.

Steve: Hello! How may I help you today?

Steve: Hi! My name is Steve. How can I help?

Steve: Jim, nice to meet you. Please let me know how can I help you today?

Jim: I am tired of going in circles looking for how to use the hardware FM Radio in my S9

Steve: Sure, I can help you with that. Allow me a moment please.

Jim: I am looking at websites that say the S9 has the FM radio tuner hardware but not how to use it/activate it/turn it on....

Steve: Got it, first you need to have (wired) headphones or earbuds as they work like an antenna. I'm not sure about the steps. Allow me a moment please.

Jim: I got the antenna part already. Even found one page that had a screen shot of the tuner.

Steve: But that's not something you download. It is supposed to be preinstalled in the phone. I'm having issues with the tools.

Jim: Preinstalled, after installed, I don't care. I just want to learn how to have it! When the auto (*online*) support asks what do I want help with and I type FM Radio or just Radio, it says it never heard of that and runs in circles, somebody needs to fix that piece of stupidity.

Steve: Gotcha. One moment please.

(While waiting, I went back and copied the article I had found.)

Jim: 6/26/2018 If you're a person who loves FM radio and owns an unlocked variant of the Galaxy S9 and Galaxy S9+, you'll be happy to know the handsets are now enabling support for FM radio reception after their most recent updates. There was a bit of confusion earlier in the year when Samsung debuted its Galaxy S9 and Galaxy S9+. The firm advertised that FM reception was indeed a feature on both devices but failed to give details that it was only going to be available on carrier-branded units. This left those that purchased the unlocked model without the ability to tune in to the radio. While it probably wasn't a huge issue, it is good to see that Samsung has finally resolved the problem after three months.

Steve: Yes, I double checked that on the Internet as well. I'm checking the manual but doesn't show me any info about it. Have you checked directly with Samsung Jim?

Jim: NO I haven't. I didn't buy the phone from them, I bought it on a two-year contract with your employer.

Steve: Thanks for clarifying. Not really, I'm even checking on Samsung's website and doesn't show me any info about it. Is the phone updated Jim?

Jim: It has been updated to Android 9.

Steve: Allow me to connect you with our Tech Support Team so they can better check this. Is that okay with you ?

Jim: Sure, anything to get an answer.

Steve: Thanks, please keep the chat window open as this might take a few min.

Jim: I will do that.

Steve has left the chat.



## Penguin Platform

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

### IS THIS THE END OF

### FLOPPY DISK IN LINUX? – In

a recent commit to the Linux Kernel, Linus Torvalds marked the floppy disk drivers as orphaned. Could this be the beginning of the end of floppy disks in Linux? The article from It's FOSS, explains what he means: <http://bit.ly/314WNTL>

### HOW TO STOP INSTALLING UPDATES AUTOMATICALLY ON UBUNTU OR DEBIAN (UNATTENDED UPGRADES) –

Debian and Ubuntu based Linux distributions can automatically install the latest security (and others) updates with the use of a package named "unattended-upgrades". While it's a nice feature to have, quite a few users complain about it and the Microsoft Windows-like behavior of installing updates with no input from the user. Those wanting to get rid of this behavior of automatically installing updates on Ubuntu or Debian 9+ with Gnome, have 2 options. This Linux Uprising article explains how: <http://bit.ly/30vjBvs>

### HOW TO ENCRYPT AND DECRYPT FILES WITH GPG ON LINUX –

Protect your privacy with the Linux gpg command. Use world-class encryption to keep your secrets safe. This How-To-Geek article shows you how to use gpg to work with keys, encrypt files, and decrypt them. <http://bit.ly/2NSG8RX>

You are being transferred, please hold...

Steve: We are currently experiencing very high chat volumes which may cause long delays. An agent will be with you as soon as possible.

==== quite a bit later =====

Agent Regina enters the chat.

Regina: Hi! My name is Regina. I'm happy to help! Please give me a moment to review your request. No worries. I can help you with that. Can I have your name and wireless number please?

Jim: Jim Sanders 714-xxx-xxxx.

Regina: Thank you.

Regina: Jim, I understand that. The issue is with the FM radio in the Galaxy S9 device. I can completely understand your concern. As this is the issue with the device application, it should be resolved by the Samsung team.

Jim: I am not concerned. I just want instructions from ATT on how to use a feature of my S9 phone

Regina: I understand that. I will help you with the instructions.

Jim: That's nice, because as noted before, when one types in FM Radio or just Radio, the what can we help you with screen says, "say what?" and runs in circles. That all by itself blows.

Regina: Usually FM radio apps will be paid apps.

Jim: We are talking about FM tuner hardware that is already in the phone. The same as if you turned on your transistor radio and started tuning to your favorite music station in your locality. DO you have to pay for that?

Regina: Generally, you will need to pay for the FM. It will not be free in the Galaxy phones.

Jim: I think you should transfer me to a supervisor as it is clear you are not sufficiently technically knowledgeable.

Regina: Sure, Jim.

Regina has left the chat

==== another wait =====

I then spent over a half hour chatting with the "supervisor" and largely got the same runaround. At one point I said that if AT&T is going to advertise a cell phone that has an FM radio tuner, they should support how to use it. He wanted proof that AT&T had advertised a radio with that feature, and I found one for a radio made by ZTE. We went around and around about whether or not it was AT&T's obligation to support the radios in the cell phones that they sell through agents like Best Buy. I pointed out they provide support/help with lots of other features of the phones they bundle with their service. He continued to maintain that it was not AT&T's responsibility, and that I should go talk to Samsung using the 800 number that he supplied.

So I did that. I spent quite a bit of time on the phone with a very nice Samsung representative that tried quite hard to be helpful. He agreed that yes, the Galaxy S9 does indeed have an FM tuner built into it. That it appeared that Samsung has a program that interfaces with the FM tuner chip but does not install it on phones that are shipped to the United States. He said that the program/app looked like it had to be installed at the factory and he could find nothing about installing it later on.

## \* \* Computer Jokes \* \*

### Stolen from Everywhere

#### Famous Computer Quotes

'I think there is a world market for maybe five computers'

- Thomas Watson, IBM, 1943

'32 bits ought to be enough address space'

- Vint Cerf, 1977

(While IPv4 has survived for 30 years, IPv6 is just around the corner)

'640K should be enough for anybody' - Bill Gates, 1981

In this world there are 10\* types of people, those that know binary and those who don't.

\* (binary number 2).

#### Printer Problems

When the office printer's type began to grow faint, the office manager called a local repair shop. "Our office printer isn't working right," he said. "The print is growing so faint it's almost unreadable."

"It probably just needs a cleaning," the friendly repairman on the phone said. "We charge \$50.00, but it's really not hard to do. You could probably do it yourself just by reading the printer's manual."

"Wow!" the office manager exclaimed, pleasantly surprised by the repairman's candor. "Thank you!" He then asked, "Does your boss know that you discourage business?"

"Actually, it's my boss' idea," the repairman replied. "We usually make more money on repairs if we encourage customers to try fixing things themselves first!"

Further research revealed that the FM radio receiver function is built into the QUALCOMM modem chip that a lot of cell phone manufacturers use. That function is free to the cell phone manufacturer whether they care to use it or not. No extra charge! I normally don't care much for conspiracy theories, but I ran across a few more web pages that had a cynical article that suggested that AT&T and other carriers don't want to mention the feature as it would diminish their revenue from streaming music data usage. When you go to the [www.samsung.com](http://www.samsung.com) site and look up the specifications for the Galaxy S9, there is a long, long list of features, but NO mention of FM radio. Is there collusion between Samsung and the American carriers to influence the results in the market? The American people have a right to know! The FM radio stations of America should demand the Congressional Oversight Committee add this to their list of investigations.

On the BRIGHT SIDE, my research found two things that surprised me. First, there is an APP on the Google Play Store that has been there quite a while called NextRadio. It does exactly what I need, and that AT&T refused to acknowledge exists. NextRadio has two modes of operation. The basic tuner screen (see photo) and a radio station logo screen. The tuner screen allows you to enter a frequency directly. The tap on a logo screen (with call sign and frequency) is determined by the ZIP code you enter. NextRadio used to do streaming but stopped as of Jan. 2019. Second, there is a list of 222 phones that the app works on. The list is at: <https://nextradioapp.com/>. On the DARK SIDE (well, disappointing anyway), several non-geek friends of mine treated the knowledge that their phone has a FM Radio tuner with an "OK, so what, ho-hum, who cares, my streaming works great" attitude. Meanwhile, I am enjoying listening to my favorite FM music stations even if I have to use the wired earbuds instead of my blue tooth headset.



From the September 2019 issue, Orange Bytes, [www.noccc.org](http://www.noccc.org),  
[jsanders@igasmicro.com](mailto:jsanders@igasmicro.com).

#### iPhone Sound Menagerie

by Jim Cerny, Help Desk Support  
Sarasota Technology Users Group, FL

It can be embarrassing when your phone sounds off when you are in a meeting or someplace quiet. You probably know about the sound "on - off" switch on the side of your phone, right? -- but the many other options for sounds you have available can be surprising. Let's take a look at a few of the most popular ones and when you would want to use them.

On your iPhone, touch "Settings" and then "Sounds & Haptics." Haptics, for those of you who are out of touch with some technical jargon, has to do with tactile sensations you feel when your phone wants your attention. In other words, among other things, your phone can vibrate.

## Odds and Ends

The **abacus**, also called a counting frame, is a calculating tool used for performing arithmetic processes. It was in



use in the ancient Near East, Europe, China, and Russia, centuries before the adoption of the written Hindu–Arabic numeral system. The exact origin of the abacus is still unknown. Today, abacuses are often constructed as a bamboo frame with beads sliding on wires, but originally they were beans or stones moved in grooves in sand or on tablets of wood, stone, or metal. The abacus was in use centuries before the adoption of the written modern numeral system and is still widely used by merchants, traders and clerks in Asia, Africa, and elsewhere.

American, William Burroughs invented the **adding machine** in the 1880s. Adding machines didn't have the key features of computers, such as internal memory, but they enabled accountants to carry out arithmetic more efficiently and accurately. By the end of the century, inventor Herman Hollerith had developed a **punch-card machine** to speed up data handling for the U.S. Census. The tabulating machines recorded data by punching a pattern of holes into cards.

(The sound options for your iPad are fewer because it is not intended to be used as a cellular phone).

Side switch on side of phone – turns sounds “on” or “off.” When “off,” this is called “silent mode.”

The following are found in “Settings” -> “Sounds & Haptics”:

- Vibrate on Ring (on/off) – if “on” will vibrate your phone while it is also ringing.
- Vibrate on Silent (on/off) – if “on” will vibrate even if your phone is on silent.
- Under “Ringer and Alerts” there is a slide volume adjust. Mine is up all the way on this one which means if my phone “rings” with a sound it will be the loudest possible. It’s not that my hearing is failing, it’s that my pants pockets are getting more insulated!
- Right below that is “Change with Buttons” (on/off) – This option, if turned “ON,” means that the volume of the sounds can be adjusted by the “side buttons” which are used to turn the volume up or down.
- If “OFF,” the side buttons will NOT adjust the volume.

Now comes a really fun list of “Sounds and Vibration Patterns” – Look at this list and you can pick and change the sound or vibration pattern of all the events listed. Get a new email? Pick a sound to tell you that event happened. I believe you can get (or purchase through the App Store) more ringtones, but the ones provided for free are enough for me.

Below that list are:

- Keyboard Clicks – if “ON” will make a click sound when you touch a keyboard key on your device.
- Lock Sound – if “ON” will hear a shutting sound (like a door or cupboard door closing) that lets you know you’ve locked your phone without needing to check.
- System Haptics – if “ON” will allow vibrations.

Do Not Disturb – this is a very helpful setting found just below “Sounds & Haptics.” It provides a list of options for you to explore to keep your phone from bothering you at certain times. Thankfully there is a short description of each option to help you decide if it is something you want to use. For example, I have my phone’s “Scheduled” option turned “ON,” and I have a set time span from 10 p.m. to 8:30 a.m. during which I do NOT want to be disturbed. The phone functions will work (receive calls, etc.) but I will not know unless I am looking at the phone – there will be no noises or vibrations. True to providing options on top of options, there is an “Allow Calls from” option that WILL allow certain calls to come in even if you DO have “Do Not Disturb” turned on.

Ah, remember the old days when you just unplugged the phone when you didn’t want it to ring?

From the July issue The STUG Monitor, [www.thestug.org](http://www.thestug.org),  
[jimcerny123@gmail.com](mailto:jimcerny123@gmail.com).

**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 go to [www.rcsi.org/newsletr.htm](http://www.rcsi.org/newsletr.htm) and click on the URL.

## Scientists Create a New Kind of Artificial Flesh That Heals Itself Like The Real Thing

By Carly Cassella, 8 DEC 2019

Artificial flesh is growing [ever closer](#) to the real thing. Scientists in Australia have now created a new jelly-like material which they claim has the strength and durability of actual skin, ligaments, or even bone. "With the special chemistry we've engineered in the hydrogel, it can repair itself after it has been broken like human skin can," [explains](#) chemist Luke Connal from the Australian National University.

"Hydrogels are usually weak, but our material is so strong it could easily lift very heavy objects and can change its shape like human muscles do." Having a squishy material with such remarkable properties could be huge for the development of next-generation *soft robotics and biomedical devices*. Creating a shape-changing hydrogel that has multiple functions has proved an ongoing challenge for scientists, even with natural inspiration from jellyfish, sea cucumbers, and Venus fly traps.

While [some hydrogels](#) can withstand mechanical stress, others have [self-healing properties](#), and a few more have the abilities to memorise shapes or change colours. As far as the ANU researchers know, no one else has been able to incorporate all these functions into one all-encompassing gel. At least, not at the speed and efficiency they've achieved. Putting their material through multiple tests, the authors claim to have created the first dynamic hydrogel that is strong, tough, fatigue resistant, self-healing and able to change shapes and 'remember' them afterwards.

Continue reading this article in [www.sciencealert.com/a-new-kind-of-artificial-flesh-has-been-designed-to-heal-itself-in-a-hurry](http://www.sciencealert.com/a-new-kind-of-artificial-flesh-has-been-designed-to-heal-itself-in-a-hurry).

## Trash talk hurts, even when it comes from a robot

Source, Carnegie Mellon University, November 19, 2019

Discouraging words from machines impair human game play

Summary:

Trash talking has a long and colorful history of flustering game opponents, and now researchers have demonstrated that discouraging words can be perturbing even when uttered by a robot.

Trash talking has a long and colorful history of flustering game opponents, and now researchers at Carnegie Mellon University have demonstrated that discouraging words can be perturbing, even when uttered by a robot.

The trash talk in the study was decidedly mild, with utterances such as "I have to say you are a terrible player," and "Over the course of the game your playing has become confused. " Even so, people who played a game with the robot -- a commercially available humanoid robot known as Pepper -- performed worse when the robot discouraged them and better when the robot encouraged them.

Lead author Aaron M. Roth said some of the 40 study participants were technically sophisticated and fully understood that a machine was the source of their discomfort.

"One participant said, 'I don't like what the robot is saying, but that's the way it was programmed so I can't blame it,'" said Roth, who conducted the study while he was a master's student in the CMU Robotics Institute.

But the researchers found that, overall, human performance ebbed regardless of technical sophistication.

Continue at <https://www.sciencedaily.com/releases/2019/11/191119075309.htm>.

## A contact lens that can show when blood glucose levels are high

by Bob Yirka , Tech Xplore, December 9, 2019

A team of researchers, affiliated with several institutions in the Republic of Korea, has developed a contact lens with a tiny LED light that turns on and off to show blood glucose levels. In their paper published in the journal *Science Advances*, the group describes how they made their contact lens and how well it worked when tested.

The current standard method of at-home glucose testing is collecting a tiny blood sample and then using a micro-scale device to test. While not unduly painful, most diabetics would likely prefer a means for testing their glucose that is both gentler and easier to carry out. Because of that, [health scientists](#) continue to carry out research looking for a better way. Prior research has shown that human tears can be used to test for glucose levels, leading many to look into ways of obtaining it for testing. In this new effort, the team in Korea has designed and built a [contact lens](#) with a tiny LED light that remains lit when [glucose levels](#) are normal and turns off when they go too high—they have named it, aptly enough, the “wireless smart contact lens”. The device exploits the body's automatic and continuous secretion of tears to keep the eyes from drying out.

Read the rest at <https://techxplore.com/news/2019-12-contact-lens-blood-glucose-high.html>.

### \* \* \* \* \* Regional & Club News \* \* \* \* \*

#### Club Planning Meeting

Our last two planning meetings have centered around methods to advertise the club, attract new members and keep the club going. We are working on setting up a YouTube channel and a method of recording and possibly streaming our meetings live. The ‘live’ part would depend on the Internet bandwidth available at our meetings, which, right now is very questionable. We will not be renewing our ‘bulk mailing’ permit at this time, so bulk mailing of newsletters will be on hiatus for now. We did not have a formal vote on stopping the printing of newsletters (some planning members were not there), but already one member wants to stop printing. Other ideas would be to print for the computer stores and ‘out of staters’ and have some copies available at our meetings, for anyone wanting a hard copy.

You, the club members, can voice your opinion at the following email addresses:

Pres: Steve Staub, [srstaub1@rochester.rr.com](mailto:srstaub1@rochester.rr.com);

VP: Mark S. Lawson, [mslawson51@peoplepc.com](mailto:mslawson51@peoplepc.com);

Treas: Jerry Seward, [jerry@jerryseward.com](mailto:jerry@jerryseward.com);

Jan Rothfuss, [jan\\_rothfuss@hotmail.com](mailto:jan_rothfuss@hotmail.com);

Tony Dellelo, [tonydel@techie.com](mailto:tonydel@techie.com);

Bob Avery, [webmaster@rcsi.org](mailto:webmaster@rcsi.org).

This is your chance to voice your opinion and help shape or improve the club. However it turns out, I can still print some copies and bring them to our meetings, but they will be in black and white, since I do not have a color laser printer. Very few clubs, across the country, actually print a hard copy of their newsletters and we might be the only club in Rochester, that currently does. We have always had online copies at our website [www.rcsi.org](http://www.rcsi.org) and I have some at my **Pcloud** storage at <https://tinyurl.com/tonydel-rcsi>. We hope to hear from you. Thank you.