



Midland Michigan

# BITS AND BYTES

MAY 2018

<http://mcc.apcug.org/>

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## **GENERAL CLUB MEETING**

Midland Public Schools Administration Building  
600 E Carpenter Street - Room D

**Wednesday, May 23, 2018**

**6:00 P.M.**

**Educational, Fun, and Interesting Web Sites** (submitted by Howard Lewis)

<http://heavens-above.com/>

Find out what's going on in the sky above.

<https://www.identitytheft.gov/>

If your identity has been stolen, the government can help you set up a recovery plan.

<https://nationaldaycalendar.com/>

You want to know what holiday today is? This site can tell you. Every day is a holiday (of some sort).

<http://www.kansascity.com/news/local/article197241499.html>

The Veterans Community Project in Kansas City decided to try to do something about homeless veterans and built thirteen tiny homes (240 square feet). Each homeless veteran gets to live in the homes for six to twelve months in an attempt to get back on their feet in their civilian lives.

<https://www.sciencealert.com/>

This site is for everyone who enjoys fascinating and inspiring science news.

**From How-to Geek**

<https://www.howtogeek.com/129178/why-does-64-bit-windows-need-a-separate-program-files-x86-folder/>

What's the Difference Between the "Program Files (x86)" and "Program Files" Folders in Windows?

<https://www.howtogeek.com/349114/shutting-down-doesnt-fully-shut-down-windows-10-but-restarting-it-does/>

Shutting Dow Doesn't Fully Shut Down Windows 10 (But Restarting Does)

<https://www.howtogeek.com/fyi/microsoft-just-removed-homegroups-from-windows-10/>

Microsoft Just Removed HomeGroups From Windows 10

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**Introduction to Personal Digital Security and Privacy**

Presented by Robert Hurlbut

Meeting review by John Kinkopf, Member, Danbury Area Computer Society, CT

[www.dacs.org](http://www.dacs.org) - [dacseditor \(at\) dacs.org](mailto:dacseditor@www.dacs.org)

Our guest speaker at the August general meeting was Robert Hurlbut, an independent software security consultant and co-host of the Application Security Podcast. Robert delivered an excellent talk that covered many aspects of the wide field of software security. An expert in the field, he managed to provide lots of useful information without becoming too technical.

Asked from the audience which anti-virus software he uses, Robert answered rather provocatively: none! Most in the computer security field don't use an anti-virus software . . . though he keeps Microsoft's Windows Defender on, included with Windows 10. Why? He explained that those in the security field live in a secure way, while anti-virus software usurps elevated privilege of one's system, more than any other application. We don't know if anti-viruses have faults in their code or security issues. And the majority of attacks these days are not the viruses of old, but things like ransomware that anti-viruses can't find, no way.

Updating Windows is essential to combat ransomware, and using Windows 10 over Windows 7 is his recommendation; definitely don't use Windows XP or earlier versions. Where a couple years ago there were 100,000 new virus patterns per year coming out; now it's 200,000 per DAY with which anti-viruses can't keep up. Thus, restrict your machine from executing things without your permission, meaning beware of clicking on things, and don't surf the internet as administrator, but rather in a user account. He also mentioned that there have been recent [but disputed] allegations against Russia-based anti-virus Kaspersky Labs.

Our connected world is a tracked world. Many TVs, home devices, and Echo or Home personal assistants listen to you. Many smart devices are security openings. Stores you enter may try to hook up with your phone's wi-fi to find out things about you. Credit card purchases leave footprints. [Yahoo scans my Trenton Computer Festival emails to pitch me "Meet Trenton Singles" ads. They guess and list my email recipient's phone number ("No, an out-of-state friend's church"), and "related contacts" as I compose.]

Private photos that iPhones backed up to the iCloud were obtained by fooling celebrity victims into divulging passwords with phishing emails. [Websites derive revenue from letting Facebook, Twitter, and marketing analysts observe which can be blocked by the NoScript extension for Firefox.]

Showing an RFID shield, Robert told how his Fitbit activity tracker began flashing numbers and making strange noises at the DEF CON hacker convention. Though visitors are warned to turn off any Bluetooth device at hacker conventions, a Fitbit's listen remains on. He's refraining from connecting it to anything until he can test it for tampering on a laptop he can wipe.

Get rid of many routers known to have vulnerabilities. Buy your own wi-fi equipment, using your own router over those an ISP provides, so you're managing your wi-fi instead of them. Use WPA 2 for your home wi-fi encryption; DON'T use WEP.

### Virtual Private Networks (VPN)

To provide a secure channel to network servers over the internet, companies commonly use Virtual Private Networks for off-site workers. Phones can also be connected by VPN. Free personal VPNs offer privacy, not anonymity — you pay by providing info of your use that may be sold. Robert advises, nothing is free; don't use a free VPN. Use VPNs when you can, and only reputable pay VPNs [\$60-\$120/yr]. [Websites rate VPNs.] Robert subscribes to F-secure Freedome; it logs attempts stopped to track you and how much transmitted data was protected; they've been a reputable provider for 25 years. PIA is a VPN recommended by publications as doing minimal logging of the user's IP address and usage. For banking Robert answered that he would use a VPN, but they raise banks' suspicions of your authenticity. Asked about using a VPN to bypass media play geo-restrictions, Robert followed up by email that he once used ExpressVPN, and gave these references:

<https://thevpn.guru/how-bypass-geo-restrictions-location-errors/>

<https://www.bestvpn.com/best-bbc-iplayer-vpn/>

Audience members pointed out that governments may require VPNs to provide their logfiles of users. A VPN user in the audience shared that PIA's encryption processing made his battery life prohibitively short, in his experience. OpenVPN is open source; keep its patches up-to-date. OpenVPN how to:

<https://openvpn.net/index.php/opensource/documentation/howto.html>

### Browsers > Tor > Tails

Unfortunately, browsers track you. While Apple is good at security, their Safari browser lags; but, at least it excludes Flash, notorious for having security and reliability issues. [July News Flash: Adobe will pull the Flash plug-in in 2020.] Search engine DuckDuckGo.com claims not to track you . . . they say. URLs beginning with https provide improved communication security over http sites.

By relaying online communication through multiple nodes on its volunteer network around the world, free download Tor (The Onion Router) anonymizes a web surfer's identity and point of origin. Once the route for each use is established, one surfs the internet via Tor's modified Firefox browser — during which all other browsers must be closed for Tor's anonymity to be effective. Downsides are that while preserving your web anonymity on your end, many websites recognize Tor exit nodes, and place restrictions. For example, Wikipedia restricts edits made through Tor; BBC blocks its use to access iPlayer. And Tor's practicality is limited by slowed browsing from bouncing communications around multiple anonymizing

nodes in world locations of varying internet speeds. Only download Tor from the Tor Project website: <https://www.torproject.org>

Tor is used to access Tor sites on the dark web which Edge, Google, and Chrome won't. Because it's possible that data may still unmask you, the next step is to use Tor in Tails.

Tails (The Amnesic Incognito Live System) is a live operating system the user boots from a USB drive or DVD for the purpose of having no connection to anything on the PC, say a library PC, just the network. When your session is finished no data is saved, everything is anonymous, and traces are not left when you disconnect. But associating with, for example, your email or Facebook would give you away, of course. As using your home computer would identify you to your ISP. It's better to get a dedicated laptop with completely separate email and other accounts that you never use in ways to identify you. The Tails website: <https://tails.boum.org>

## Passwords

Early August News Flash: Robert Burr, responsible for the 2003 recommendation that secure passwords include upper and lower-case letters, and symbols that render remembering passwords difficult, made the media rounds rescinding the suggestion, or “\|3V€R /Λ1|\|D.” His, and Robert's current thinking is to use long passphrases – passwords composed of words strung together into a nonsense phrase you can remember. [For example, “A wet duck only flies at midnight,” “The blue sun melts the wet snow” – from TV's “Get Smart”]

The “Have I Been Pwned?” website is a free service to which one submits their email address. The site, maintained by Australian Troy Hunt, will reply if the account is found among the millions breached, along with when, what, and where it was found, say perhaps in Pastebin, where a lot of stuff happens. You may also sign up for its Notify Me service, to be notified in the event future account compromises are found, for which Pwned needs to save your email. Robert has met Troy; the site gets some financial support but he does this mainly as a labor of love. Website: <https://haveibeenpwned.com>

A Password Manager (software) helps you manage your passwords with one master password that should be chosen to be especially difficult to crack. Password Managers can also manage security questions. Security question answers you choose need not be truthful, and should not be obvious. The password manager Robert uses is Blur, often recommended in books, which also can create virtual credit cards for you. Blur hasn't shown up in any breaches or other problems, while 1Password and LastPass have had reported security fallibility.

## Two-factor authentication (2FA)

An example: Upon entering my account password, YouTube requires that I submit a code sent to my email (or phone). Robert likes it; I feel my YouTube account is more secure. But he thinks that it's crazy to give oft-hacked Yahoo his phone number. The website TwoFactorAuth.org lists whether or not websites support the additional security of 2FA.

## Email

All emails are wide open. [Like my ballot at the Putnam County polling place!] They are transmitted from server to server, where hackers can view them along the hops. Even if you delete an email, the email services have made copies for sending redundancy. Be wary of clicking on email links and attachments. For privacy consider premium email services based outside the U.S. that encrypt. OpenPGP.org can be tried for encryption. A member of the audience reported using it in Gmail. The cable email accounts are worse regarding sharing your email information. Don't ever send forms with your social security number via email. [Send word documents only as PDF files, for with Word file hidden histories a recipient could work back all your revisions, back to the resume I started writing this review over!]

## Credit Cards

Robert said your health care records are worth even more to criminals. Check your credit report annually, at the beginning of the year. A few months later check Experian and Transunion for whether anyone is opening an account in your name. Robert found someone had opened an account under a previous address. One can download them or receive them by regular mail, but don't have the reports sent by email. Consider putting fraud alert and credit freezes on your credit card.

Beware of credit card skimming. July News Flash: wafer-thin "insert skimmers" stealing bank card information at ATMs are proliferating. August News Flash: tiny gas pump skimmers transmitting credit card information, as Robert mentioned, are featured on TV news. Robert mentioned that credit cards with chips are partially better, but not as good as in Europe, where a PIN is required, too. At locations credit card skimmers target, it's better to use a prepaid card or Apple Pay. But Apple Pay's one-time token uses near field communication (one needn't contact, but be in proximity) and there are devices the hacker can use to connect and obtain information.

Iconic hacker Kevin Mitnick advises having someone else buy your debit cards so video cameras don't record that it's your purchase. NSA whistleblower Edward Snowden did this, along with using Tails.

## Mobile Security

Update to the latest operating system version and patches. [Ha! Google no longer supports Android versions predating 4.4.] For iOS definitely get the latest version, 10.3.3, which patches a chip vulnerability that was exploited at the Black Hat hacker conference. Passwords or passcodes protect your device. Adjust your permissions per app to, "No, no, no, no." Robert keeps his Uber car service location permission set to Never, except for the few minutes he needs to switch the permission to Always to use the app. Robert answered how to, for an Android phone, go to Application Manager, click on the app, and it should show you the permissions, at least since the 6.0.0 Marshmallow release. Anything version 5 or below, you couldn't do this. For Android, you definitely want an anti-virus. Sync, back-up your data, and install a phone finder app. It is very important to turn off wi-fi and Bluetooth when you're not home or not around trusted endpoints, which is nearly everywhere. Turn them off when they are not needed.

Pineapple is a popular device at the hacker conferences. If your phone has ever been connected by wi-fi it retains that information, and connects when in range to any of them when its wi-fi is on. The Pineapple connects to your phone, without your knowing, by pretending to be one of its former wi-fi connections.

The most secure mobile phones are the basic flip phones, turned off [in an RFID shield]. Tether your mobile phone to a hotspot in lieu of wi-fi or Bluetooth. Law enforcement uses fake cellular towers to spy. [August News Flash: Android messaging apps were found carrying SonicSpy trojanware to spy on audio, take control of phone cameras, and nearly all of a phone's functions.]

## Security News Sources

Robert said that he keeps current by following several security news sites on Twitter. KrebsOnSecurity.com is an oft-referenced website, widely sourced when it detailed how customer accounts were hacked though Target's air-conditioner computers. [One can subscribe to his email newsletter.] Robert has Google searches set up to feed emails when certain terms come up such as router or VPN. One audience member subscribes to Wire's news feed, another visits <https://www.social-engineer.org> .

## Books Robert Recommends

The Complete Privacy and Security Desk Reference: Volume 1: Digital – Michael Bazzell and Justin Carroll

Hiding from the Internet: Eliminating Personal Online Information – Michael Bazzell

Personal Digital Security: Protecting Yourself from Online Crime – Michael Bazzell

The Art of Invisibility – Kevin Mitnick

How to Be Safe in the Age of Big Brother and Big Data – Kevin Mitnick

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## **iPad and Smartphone – Together at Last**

Presentation by Gabe Goldberg, APCUG Advisor, Region 2

Meeting Review by George Cadmus, Treasurer, Northern Neck Computer Users Group (Virginia)  
September 2017 issue, The Computer Link - <http://www.nncug.net/> - Geocadjr (at) verizon.net

Gabe started the presentation by giving his experiences with a tablet and smartphone. It was about six years ago that he decided to purchase an iPad just for the experience of having one and to see what they were all about. He wasn't quite sure which iPad to purchase and decided on the middle of the road and purchased the 32 GB model.

Gabe advised over the course of his computing life he has obtained a bookcase full of manuals from purchasing other computer equipment. He was very surprised when he opened his new iPad box and found that it did not contain any documentation or instructions on how to operate it. Gabe advises if you are looking for help with your iPad, there are many sources you check printed help books that are available at book stores and Amazon; you may even find some manuals at your local library. You can also obtain help by visiting online help sites. If you have a local Apple group in your area, you may also seek help from them.

About Apple Care, Gabe decided not to get a policy, as in his opinion it was not worthwhile. He opted to purchase the Wi-Fi only iPad instead of one with cellular connectivity. Setting up the Wi-Fi connection was simple. Once you set up your Wi-Fi connection, it will remember your network location. Gabe advised it was a good idea to check your privacy settings to stay safe. He also suggested you keep your apps updated.

After using his iPad for some time, it was now time to get a new upgraded iPad. To get the new iPad, he convinced his wife that it was time for her to get an iPad and he started showing her what she could do with the device. Gabe's wife agreed that she would like to have an iPad as it seemed very interesting. So, Gabe gave his wife his old iPad and he was now able to purchase a new one for himself.

Gabe told he used a flip phone for a long time before purchasing an iPhone. The flip phone did everything he wanted it to – it made and received telephone calls! Verizon even sent free digital phones to both him and his wife.

In 2016, he decided it was time to update his phone and purchased his first iPhone. He purchased an unlocked iPhone at an Apple store. The sales person was pleasant but the telephone was expensive.

The sales associate started out the conversation by asking Gabe what his needs for the phone were going to be. Once finding out what Gabe needed for his phone, the sales associate suggested several models. Gabe opted for the larger 6S Plus. An advantage of purchasing a phone at an Apple store is that they provide basic free classes on how to use the phone and provide some tips and techniques.

To register for an Apple account was quick and easy. Gabe opted to use Consumer Cellular as his carrier. He gets 250 minutes and 1.5 GB of data to share with his wife each month. The cost for this plan is only \$47 a month. Also with a Consumer Cellular account, if you go over your allotted 1.5 GB of data, Consumer Cellular ups your data plan to the next tier for only one month. After that, it goes back to the original data plan. Gabe exceeded his plan one time and was moved to the next tier which only cost him an additional \$9. Prior to signing with Consumer Cellular, he was a long time Verizon wireless user. Consumer Cellular was easy to set up.

They have great customer service with flexible and economical call/data plans. They also have a great referral bonus plan that rewards you \$10 for every person you recommend to Consumer Cellular. Before you can use Consumer Cellular, they will send you a small circuit card that you must insert into your phone.

Gabe reported that there are many apps for your phone. There are way too many apps to just browse, and you should seek suggestions and recommendations of which apps you would like. Before downloading apps, you should check the ratings and reviews. If you see a lot of bad reviews, you probably shouldn't download that app. You should take note when the app was last updated. Also, be careful and make educated choices when choosing an app.

There are many free apps to download. There are also many you must pay for. Sometimes it is important to remember, "You get what you pay for." It is also important to support the app developers. They are providing you a service and for them to continue their work, a contribution to them should be considered.

With your iPhone, and if you are a customer of a cable company, you can watch their TV channels on your iPad and iPhone. You can also watch movies on your devices.

Some of Gabe's favorite apps include a navigation app called Waze. Waze will give you directions to a location and will also track traffic in real time. This can help you if you become bogged down in traffic. It will offer you an alternate route. This information is obtained by other drivers on the system. He also uses Keynote, Safari-Firefox-Chrome, Life 360 and has also tried virtual reality. To help other users who may be contemplating downloading an app, you should consider rating the app that you are using and share your experiences both good and bad.

Gabe gave some usage tips for the phone which include closing all apps that you are not using. Also delete any apps you no longer use. You should use an ISP Wi-Fi hotspot to save some of your bandwidth. With newer vehicles, you can connect your phone to the vehicles with the built-in technology.

You can connect via Bluetooth and also by using Apple Play. Other tips included using your charger when using a navigation app with your iPhone as your phone battery may die before reaching your destination. You should also consider a speaker and earbuds for your phone. You may also want to consider getting a hip case for your phone for comfort and accessibility. You should also add your contacts to your phone so you will always have the numbers handy. You may also want to explore the world of texting. One other tip to consider is setting up "find my phone" in case your phone is lost or stolen. Voice recognition is another thing to consider.

On the subject of purchasing an Apple watch, Gabe reported that he has no interest of ever purchasing an Apple watch as the screen is much too small for him. The iPhone is about the smallest screen he would ever consider.

Gabe ended his presentation by telling the group if they ever have any problems with their equipment or programs, they should consider using Twitter to complain. He advised he was having problems with is Verizon service and used his Twitter account to contact the CEO of the company. Gabe reported that he did receive a reply from Verizon and the problem he was having was solved. He said that companies have personnel that monitor social media and can help if you have any problems.

We thank Gabe for the wonderful and informative presentation.

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## Web Surfing for Music

By Len Nasman, Webmaster, Bristol Village Computer Club, OH  
September/October issue, BVCC Newsletter - <http://bvres.org/bvcchome.html> - Webmaster (at) bvres.org

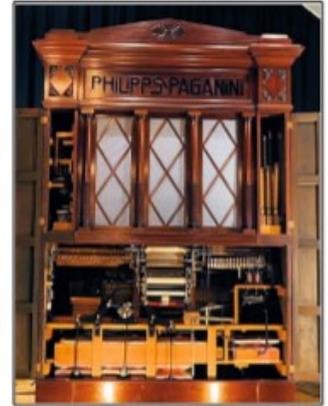
I had a little time to kill the other day, so I went web surfing. One category of things I investigated was ***strange musical instruments***.

## Auto Playing Music Machines

During my surfing, I found some YouTube videos of music boxes in a museum in Holland that Diana and I visited during our [Tulip Time Trip](#).

The [Museum Speelklok](#) has a large collection of music boxes and auto playing musical instruments. One of these was the [Paganini](#). A fellow from [Wintergatan](#) (which is yet another story) was provided with a special demonstration of this amazing machine.

The Paganini uses paper rolls to cause multiple musical instruments to play. This is like a player piano on steroids. The Paganini was built to be inside a building, however, some similar machines were for outdoor use. For example, the picture is of a giant [fairground organ](#).



If you watch the Paganini video, you will see the operator loading the program into the machine. This machine uses large linked punched cards that look like a giant version of player piano rolls that are flat cards linked together. This technology was borrowed by earlier automated weaving machines.



The [Jacquard machine](#) was a device fitted to a power loom that simplifies the process of manufacturing textiles with such complex patterns as brocade, damask and matelassé. It was invented by Joseph Marie Jacquard in 1804. The loom was controlled by a "chain of cards", a number of punched cards, laced together into a continuous sequence.

## Strange Musical Instruments

If you want to be amused, try Googling [strange musical instruments](#). There is a whole world of creative folks who invent or play very unusual instruments. Some are fairly well known... such as Benjamin Franklin's [harmonium](#).

It seems that Franklin likes the sound of rubbed wine glasses, but got tired of having to set up a table full of glasses, add the right amount of water to tune each glass and then play... kind of like [Robert Tiso](#) in this example.

So, Franklin cut the stems off the glasses and mounted them on a shaft that could simultaneously spin all the glasses while applying wet fingers to make the sound. Some well-known composers wrote music for Franklin's instrument, but it never took off. Maybe it did not travel very well.



The next time you finish your soft drink, you might take the soda straw and see if you can duplicate this [soda straw recorder](#). Here is a video that shows [how to make a straw recorder](#).

The picture here shows a woman playing what looks like an old barbecue grill cover, but it's actually called a [Hang Drum](#). Although the name hints that it might be Chinese, it actually comes from Switzerland. It makes some very interesting sounds.



The Hang Drum is constructed from two half-shells of deep drawn, nitride steel sheet glued together at the rim leaving the inside hollow and creating a distinct 'UFO shape'. The top ("Ding") side has a center 'note' hammered into it and seven or eight 'tone fields' hammered around the center. The bottom is a plain surface that has a rolled hole in the center with a tuned note that can be created when the rim is struck. – *Wikipedia*

Here is a cute but weird thing. This guy has arranged a collection of [kitten squeeze toys](#) and uses them to play Somewhere Over the Rainbow.



Now we get back to Wintergatan. One of their productions that has gotten a bit of attention is the [Rube Goldberg](#) looking [marble machine](#).

The machine is powered by hand, and works by raising 2,000 steel marbles through the machine into multiple feeder tubes, where they are then released from height via programmable release gates, falling and striking an instrument below. All the instruments are played by striking them and include a vibraphone, bass guitar, cymbal, and emulated kick drum, high hat and snare drum sounds using contact microphones. The music score is stored on two programmable wheels that utilize Lego Technic beams and stud connectors to trigger armatures to release the marbles.

If you find the marble machine interesting you may also like this entry from [Wintergatan](#).



## Interesting Internet Finds

Steve Costello, Boca Raton Computer Society - editor @ brcs.org <http://ctublog.sefcug.com/>

While going through the more than 300 RSS feeds, I often run across things that I think might be of interest to other user group members.

The following are some items I found interesting during the month of October 2017.

*Did you know you can "Voice Type" in Google Docs?*

<https://whatsonmypc.wordpress.com/2017/10/01/google-docs-voice-type/>

I did not know this before reading this post, and I am sure not many others do either. No special software needed, but of course, you do need to have a working microphone.

*5 Common PayPal Scams and How to Avoid Them*

<https://www.maketecheasier.com/common-paypal-scams/>

If like me you use PayPal, you should read this post and be aware of these common scams as well as others.

### *How to Use VirtualBox: User's Guide*

<http://www.makeuseof.com/tag/how-to-use-virtualbox/>

I use VirtualBox all the time and have told others about it. For anyone who wants to know more about VirtualBox this is an excellent source.

### *Android Security 101: How to Secure Your Data Connections & Browse the Web Safely*

<https://android.gadgethacks.com/how-to/android-security-101-secure-your-data-connections-browse-web-safely-0180466/>

Good general advice. Specific apps are suggested but not necessarily the best, though I use the suggested password manager and privacy browser myself, and have for a long time. It really doesn't matter, if you use a good alternative.

### *Linux For Old Laptops: The 4 Best Linux Distros to Try*

<https://www.addictivetips.com/ubuntu-linux-tips/linux-for-old-laptops-the-best-linux-distros/>

There are many Linux distributions out there. If you have an old laptop lying around, check out this post for four distributions to try if interested in trying Linux out.

### *The Best Ways to Scan a Document Using Your Phone or Tablet*

<https://www.howtogeek.com/209951/the-best-ways-to-scan-a-document-using-your-phone-or-tablet/>

If you have a smartphone or tablet with you, you also have a portable scanner. Check out this post to learn how to scan documents with Android or iOS devices. It is quick and easy on my Android smartphone.

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Most Fridays, more interesting finds will be posted on the *Computers, Technology, and User Groups Blog*:

<http://ctublog.sefcug.com/tag/interesting-internet-finds/>

The posts are under Creative Commons licensing.

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## **Be Your Own Mechanic with FIXD**

Review by Bob Schultz, Editor, Lake-Sumter Computer Society

October 2017 issue, NewsBytes - [www.lscs.us](http://www.lscs.us) - Editors (at) lscs.us

I am sure there are times you would like to answer your own question about your cars performance before you take it somewhere to have work done. You would like to know basically what is wrong with your car if you suspect a problem. Or, even if you don't have a problem you would like to know how your car is performing.

Well now you can do that. Every new car since 1996 has a port for plugging in a device to examine your cars performance.

This new device will instantly diagnose your car's problems for you and translate them into simple, easy-to-understand terms – and much more! Meaning, the next time a mechanic is trying to pull one over on you, you can call them on it! It's called FIXD. It is the first easy-to-use car health maintenance monitor.

**BEST PART:** When that "Check Engine Light" comes on, FIXD tells you exactly what's causing it in a way anyone can understand. No more looking up codes or taking it to the dreaded auto shop only to be given a list of unnecessary repairs – never again! You can also turn off the check engine light right from the FIXD App if the problem is not serious or if you want to see if it will reoccur. How cool is that?!

Sounds Great, But How Much Does It Cost? With all the benefits FIXD provides, you'd think it would cost a few hundred dollars, right? That's what makes this company so great. The founders of FIXD made it incredibly affordable so they can help as many people as possible avoid getting scammed by mechanics, while also staying on top of their car's health. It retails for only \$59 and you can purchase it on their official website. <https://www.fixdapp.com/>

Don't wait until it's too late! A small investment of a little more than that cost of an oil change can keep your car running smoothly and out of shady auto shops.



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President's Corner

## Looking Back to See Ahead

By Greg Skalka, President, Under the Computer Hood User Group, CA  
January 2018 issue, Drive Light -- [www.uchug.org](http://www.uchug.org) -- [president \(at\) uchug.org](mailto:president@uchug.org)

Another year goes into the record books, and we get a new, clean slate ahead. As we say good-bye to 2017 and prepare to start writing 2018 on our checks (hey, wait a minute; who writes checks these days, anyway?), we are confronted by this arbitrary boundary in time once again.

It is obvious the year and its length are derived from our Earth's orbit around the sun. But why set the boundary for a year in the winter? Wouldn't all those people in Times Square have a much better New Year's Eve in the spring, summer or even autumn? Our January 1 is not even tied to any astronomical event, like an equinox or solstice.

Ancient civilizations celebrated the new year at different times with respect to the seasons. Mesopotamians had their new year's rockin eve (no doubt with real stones) in the spring, around the vernal equinox. The autumnal equinox was when ancient Egyptians and Persians celebrated their new year. The ancient Greeks began their new year around December 20, the winter solstice.

So why do we believe the New Year starts on January 1st? It seems we can blame it on the Romans. Among the many things we still use that are carried over from the Roman Empire, including aqueducts, roads and a numerical system that we use to count our Super Bowls, is the Julian calendar. That calendar begins with the month of January, named for the Roman god of doorways and beginnings, Janus; his feast begins the new year.

Janus is depicted as having two faces, one looking back in time and one looking forward into the future. Around this time of year there are often predictions made for the new year. I've written columns in the past for this month, trying to prognosticate on what is to come in the tech world, mostly with little success. Bill Gates was probably right when he said, "We always overestimate the change that will occur in the next two years and underestimate the change that will occur in the next ten." I keep thinking something monumental will happen in tech in the next few years, but it rarely does, yet in 2007 few people could have seen imagined the impact the iPhone, Facebook, Twitter, Airbnb, IBM's Watson and fracking would have on our lives today. Perhaps by viewing the world like Janus, and first looking back on the past year, can be a better picture of what is to come in 2018.

We all look at the world through unique eyes, with our perceptions filtered by our own personalities and experiences. I'm heavily involved in technology on a daily basis, being an electrical engineer presently designing digital communications equipment. I read quite a bit about the latest innovations, yet I would not consider myself an "early adopter." Part of this may be due to my age; I'm part of the tail end of the baby boomer demographic. I may have a lot more money for technology, but I don't necessarily buy into it (or some of the societal change that often go with it) as much as my millennial children. I also look more at anything I'm buying as a value proposition. Cutting-edge technology may be really nice, but it usually costs a lot more when it is the latest and greatest. I prefer to wait a bit until the costs are lower, the capabilities are more proven, and the pitfalls are uncovered. I also prefer the devices that emphasize capability over cachet; I don't need a fruit on my device solely for the sake of status.

For me, 2017 was a year of increased connectivity. I bought my first smartphone in June, after moving into the world of SMS text communication with a flip phone only the year before. I've accelerated my longtime interest in home automation, adding many more Smart Home tech items. I've taken advantage of faster internet connections to stream more content, and have found a greater need to use and improve my home Wi-Fi setup. I find I'm more often using more Android and Chrome OS devices, and fewer Windows devices for my connections.

Getting a smartphone is no doubt the biggest tech change in my life in the last year, and it has been an enabler for additional tech. I was the last in my family of four to get one, in spite of being the one that paid for them all (or, perhaps because I was the one paying for them all). When I was finally able to be happy with the value I was getting, my new Samsung Galaxy J3 Prime Android phone (a new but lower cost model) joined the iPhones and Google Nexus phone on the family phone plan in June. It is great to be able to get information from the internet (practically) wherever you are. I text a lot more than call, while purposely not using the phone much for email. I find I'm using my Magellan vehicle GPS a lot less now, and the Google maps app a lot more when driving. My phone's camera is pretty good but not fantastic; while most of the pictures on this year's family photo Christmas card were taken by phones (selfies), I'm not giving up on digital cameras. When my good digital camera broke this year, I found out how poor a substitute the phone was for all but basic photography, and so got a replacement camera. My 2017 eclipse photos with the digital camera were great, while the phone photos of the event were a bust.

Yet my adoption of the smartphone into my life is a cautious and measured change. Karl Marx may have felt that religion was the opiate of the masses, but he never got to see how people's behavior has changed as a result of constant connectedness and social media. I believe smartphones and Facebook are the new opiates of the masses, and I don't want to be among the addicted. Last night at Phil's BBQ, my wife again commented to me on how many people (and not just children) were paying more attention to their screens than their families at dinner. Driver's laps are not supposed to glow; far too many concentrate on their devices, rather than the road. I'll use my phone for navigation when driving, but will always pull over to read a text or answer a call.

I've fortunately never become obsessed with social media. While I can see how, when used in moderation, Facebook can be useful to keep in touch with family and friends, its overuse can be a problem. I don't have a Facebook account, but I've seen the excessive postings of others on my wife's account. They remind me of a favorite engineering "law." *The more time you spend reporting on what you are doing, the less time you have to do anything. Stability is achieved when you are spending all your time reporting on the nothing you are doing.* Just substitute posting for reporting, and you'll see where I'm going.

My wife does more watching on Facebook than posting, but still posts more that I think is necessary, especially when we are away on vacation. It is frustrating to return to work after a weekend trip with your wife, and not be able to tell anyone about your adventures, as your coworkers have already been told by their wives about the posts your wife made on Facebook while you were away (including photos).

We have also increased our Smart Home connectedness this year. We bought an Amazon Echo Dot voice-operated assistant device for our home in late 2016, and bought a second this spring for upstairs. We now have a few light controllers and a smart thermostat that are Alexa-compatible. I even bought a Google Home Mini during the Black Friday sale, so we could see what the competing device offers. The

three networked, Wi-Fi security cameras I bought this year allowed us to watch over our home while away on vacation, and I've purchased a couple for outdoor security use as well. My new smartphone of course allows me to view the cameras, control the lights and adjust the heating while away (or just in the recliner).

One problem with all this connectedness is maintaining all the connections. I have always been suspicious of Wi-Fi as a secure means of networking, preferring wired Ethernet. With all these new IoT Wi-Fi devices, our poor little Wi-Fi access point has become inadequate. To get the range required to put these new cameras and other devices anywhere in the house I want, I've had to look at changing to a mesh Wi-Fi network. It seems that all this tech feeds on itself, creating more issues that require new technology for the solutions.

So, considering where I've been this last year, can I get any insight into where at least I'll be going with technology in the coming year? Probably more of the same, but at an increased level. I doubt self-driving cars will be available this year, but I won't be buying one if they are. They will be new and have insufficient value for their cost. Maybe in 5-10 years, though.

Will I buy a new iPhone? Not when I could have had six of the Samsung phones I bought for the cost of the replacement iPhone I bought for my wife this fall. Will I get rid of my Magellan car GPS? Maybe. Although it was useful on our eclipse trip to Nebraska (when Google Maps could not navigate due to the lack of a good cell connection in rural areas), it could probably be replaced by an app on my phone. Will I get rid of my digital camera? No, the phone camera is not good enough yet. Will I take more phone photos? Yes, it is way too convenient, and with me most of the time. Will I get Facebook or Twitter accounts? No, still not interested. Will I book an Uber or Lyft ride in 2018? Maybe, since I now have a smartphone. I've been part of a few group rides booked by others, and it seems convenient.

Since Windows 7 extended support ends in January 2019, I'll probably start worrying about what to do about our four Win7 computers later on this year. Perhaps Microsoft will extend security support. Perhaps I'll just take them off my network, like I've done with my XP machine. Perhaps I won't care, as I'm using Windows for fewer computer activities anyway. I'll be buying TurboTax to file my 2017 taxes, but my 2018 tax filing may be a lot simpler, though costlier.

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## No Personal Privacy

By Matt Batt, President, The Computer Club, Inc., Florida  
December 2017 issue, The Journal of The Computer Club  
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I want to share (1) something to think about as we enter this time of "no personal privacy;" (2) a very useful program for keeping your PC applications up-to-date; and (3) a fun website for displaying street views of houses.

My wife was reading a book on her Kindle and was getting close to the end. She wanted to finish the book, so she cloistered herself in the snug family room chair and had at it. After about half an hour, she finished the book and explained that it really was a great book and she really enjoyed it. A moment or two later, her cell phone made the noise for an incoming email and she reached over and read it. It was from Amazon and it asked her how she liked the book that she just finished. That was so spooky! It really made us feel like our privacy had been compromised. I'm a very strong proponent of technology advances and all the good things that it can bring, but this just seemed like too much and too close.

A couple of days later, she started another book, read a few chapters and had to put it down as things get busy around the first of the month. Sure enough, after a couple of days, she gets an email from Amazon asking, "how's it going." Guess she wasn't reading enough and needed to be prodded. Now, I don't know what you think of that intrusion, but I find it really disturbing. Guess we'll have to get used to it or take the Kindle offline.

An important part of being safe online is keeping your computer's software up-to-date. Outdated software often contains security exposures that can provide hackers access to your computer. Outdated software can also be buggy and have performance issues which are usually fixed with a newer version of the software. Unfortunately, if you have lots of different programs this is an onerous task.

Patch My PC Updater will make patching your PC easy. It is free and keeps over 165 apps up-to-date on your computer. It is an easy way to update or install any of these programs on to your computer.

When you open Patch My PC Updater, it will scan your system for outdated programs. It will show programs that are outdated in Red, programs that are updated in Green, and programs that are not installed in Black. With one click you can easily do all your updates. You can download Patch My PC from <https://patchmypc.net/download>.

On a more fun note, I've been sharing a website called [www.showmystreet.com](http://www.showmystreet.com). When you go to the site, you get a box where you can type in an address. It's a simple interface that lets you display almost all locations. Just start typing the location's address and the background Google Map is updated in real-time. Like any other regular Google Map, you can drag the map, zoom in/out, and select the following views: map, satellite, hybrid, and terrain. Wherever available, Show My Street will automatically display the Google Street View of the address. Type the address one character at a time and watch the location that it displays. It's amazing. The views can be directly shared on Twitter and Facebook. You can also obtain a direct URL to the view and share it with your friends online.

Be careful out there!

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## I Wuz Hacked

By Stu Gershon, Smartphone SIG Leader, Sun City Summerlin Computer Club, NV  
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One Sunday morning, I checked my email, like I do every morning. Nothing came through. I tried again, and it was the same. I called COX to see if any of their servers were having trouble or down. The line was busy. The line is never busy unless they are having trouble because they've always had fantastic customer service. I tried twice more during the day with the same results.

I finally got through to COX at about 6:30 that evening. They were not having any problems, and they couldn't help me because I have Gmail accounts and they would only intervene if they were COX accounts. I said to the technician, "What should I do?" He replied, "Call Google!" I said, "Who are you going to call at Google, they have no customer service!" He offered, "I have a number for Google support!"

He gave me the number and the first thing Monday morning I called 1-844-400-1570. I asked if they were "Google Support" and the gentleman said "Yes." His name was Daniel. We discussed the problem and he said I'd have to let him into my computer, so he could check. REMEMBER - COX gave me this number. I had to give permission and put in a code number to let him into my computer. He looked around for a while, "scanned" my computer for viruses and malware and told me I had probably been "hacked." I asked, "What do we do now?" Daniel said he'd fix it and said the charge would be \$299.99 including a one-year warranty on my computer. I figured it was worth it to get this problem fixed.

He continued to work on my computer, while I watched what he did, and we talked over the phone, throughout. He worked on my computer until 5:30 pm (from 9:30 am) and said he did what he could, the email was working with some "work-a-rounds," but it was the end of his shift and he'd call me back at 10 am the next morning.

He asked to be paid, and since my computer was adequately working and he'd been working on it for 8 hours, already, I gave him my credit card and paid the \$299.99.

The next morning, at 10 am, he called back and worked on it until almost noon. He's put ten hours into my computer, he had given me his name, and said he'd call back the following week to check if everything was alright. With Daniel's "work-a-round," my computer worked, fine.

On Tuesday, September 12th, he called back promptly at 10 am, said "hello" and asked how everything was working. I told him it was working fine, but by adding the "work-a-round" (a new email address getting the email from the old one), I was getting a lot of duplicate emails. He took another look, but this time he used a different software.

Since Gigabyte Gazette on 18 December 2017 we were still in communication over the phone, I asked "why?" and he replied, "My company has installed a new software in the past week."

The guy had already worked on my computer for TWELVE HOURS and, remember, I CALLED HIM! He said, "Look, you've been hacked, so I'm going to refund your money because we didn't do our job!"

He said, "Let me be sure." Then my PC's screen went BLACK! I asked, "Daniel, what's going on?" He replied, "It's the new software, don't worry." Coincidentally, my cell phone was right next to my computer. As the screen was black and I couldn't see what he was doing, I received text messages on my cell phone, "PayPal Gift Card - \$100!" "PayPal Gift Card - \$50!" On and on. I asked Daniel, "What's going on?"

He answered, "Nothing, I'm fixing your computer!" I answered, "Money is being taken from PayPal!" He replied "Don't worry! It's so we can give you your refund!"

I said, "Not from what I see! Goodbye!" and I pulled the plug! I immediately called PayPal, and stopped the \$450 in Gift Card charges! Then I called my Bank and put a freeze on all my credit cards. Remember, Equifax had been hacked the week before, so they were NO HELP!

Then I called Amazon, where I spend much of my money. They informed me they had "denied" a charge for a \$500 gift card (because I had never ordered something like that before, and they were trying to contact me to verify, but my computer and two phones were all in use – it's called "profiling".)

I called my friend, Chuck, at the Computer Club and he told me to bring my computer over (the Tuesday Repair SIG – Special Interest Group, had just started). I brought it over and when the guys started up my computer it required a password (which I had not made) to enter.

This is called RANSOMWARE – They lock up or scramble your computer and make you pay a fee to release your computer from their control! Chuck, and the other guys, took out the hard drive, did something to it to remove the password, and then I got my external hard drive and we restored the computer to BEFORE this incident began.

In the meantime, Daniel called five times and told me to buy three \$100 iTunes gift cards, and when I put in the pin numbers from the back of each card, the "hack-ware" would be uninstalled! He had already taken \$299.99 in payment for his services, tried to buy \$450 in PayPal gift cards, tried to purchase a \$500 gift card from Amazon, and now he wanted \$300 more? Nope! So now, two weeks later, I've restored my main computer, the email is working fine, I'm currently restoring my second laptop because I also allowed Daniel to check those email settings. I've changed all my credit cards and my passwords and I'm exhausted. I haven't lost any of the "charges" yet, because they are all in "dispute," and because PayPal, Amazon and my bank worked quickly, and I'm disputing the initial charge of \$299.99.

If that's the price I must pay, "A lesson learned, is a lesson earned!" and maybe someone can benefit from this experience. REMEMBER – I called Daniel because my trusted Internet Provider GAVE ME THE PHONE NUMBER!

The only people SCSCC members should let into their computers are our Computer Club's Repair SIG which meets every Tuesday from 1 to 4 pm in the Computer Club Classroom at the Pinnacle, and the only requirement is joining the Computer Club! They know what they are doing, and they live HERE!"

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From Judy: This article leads into a great discussion with your group members on who they trust to work on their computers, and why. If a member doesn't have a trusted person, they might think about introducing themselves to another member's trusted person. I, personally, wouldn't get in touch with a members' friend or relative.

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