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



MONITOR

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“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 from Rochester, NY. Call 966-JAZZ (585-966-5299) or 800-790-0415

Video night, served with popcorn
by Tony Dellelo

Tues, June 12

6:30 Help's Half Hour, 7:00 Business, 7:15 Main Presentation
our meetings end between 8:30 and 9:00 pm

The RCSI 'Monitor' newsletter can be found in most 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 or my cloud storage at <http://tinyurl.com/tonydel-rcsi-newsletters/>.

Some Past Presentations:
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
Close up Photography



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I Wuz Hacked

By Stu Gershon, Smartphone SIG Leader
Sun City Summerlin Computer Club, NV

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



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Special Interest Group

Linux Sig

The workshop is the **third Saturday of each month**, at Interlock Rochester, 1115 East Main St.



www.interlockroc.org

Enter through door #7 on the end of building, near *Comics Etc* and Goodman St. Find 'Interlock' on the intercom directory to get buzzed in and go upstairs to suite #200. 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

Saturdays: 5/5, 8/18, 11/3

For Conference Description & Registration Links, go to apcug2.org/category/virtual-tech-conference

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.

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Planning Meeting

Held on 1st Tuesday of each month
at 7 pm, at St. John's Meadows,
Briarwood building.

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 1st or 2nd Thursday morning,
following the monthly meeting.*

This is an update to an editorial — OK, a rant — I first posted nearly 13 years ago.

In the intervening years, not much has improved.

Connecting Windows computers together over a local network remains incredibly difficult for the average user. Making a connection that is both secure and flexible — two concepts inherently at odds with each other — is a common stumbling block.

Heck, making a connection that works at all can be a problem.

No simple solutions

There's no getting around the fact that networking is very complex. But complex tasks are what we look to

This is called RANSOMEWARE – 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!”

From the December 2017 issue, Gigabyte Gazette,
www.scscclclub/tomburt89134@cox.net.

Ask Leo !

By Leo Notenboom, <https://askleo.com/>
Making Technology Work For Everyone

Networking Sucks

After all this time, networking computers remains out of the reach of the average user, and that's really frustrating.

I apologize for the slightly coarse language, but sometimes only the right word will do.

Computer networking is way, way, *way* harder than it should be, and much harder than it could be. Quite honestly, it's still too frequently beyond the abilities of the average computer user.

The state of networking

computers and technology to simplify for us.

And it's letting us down.

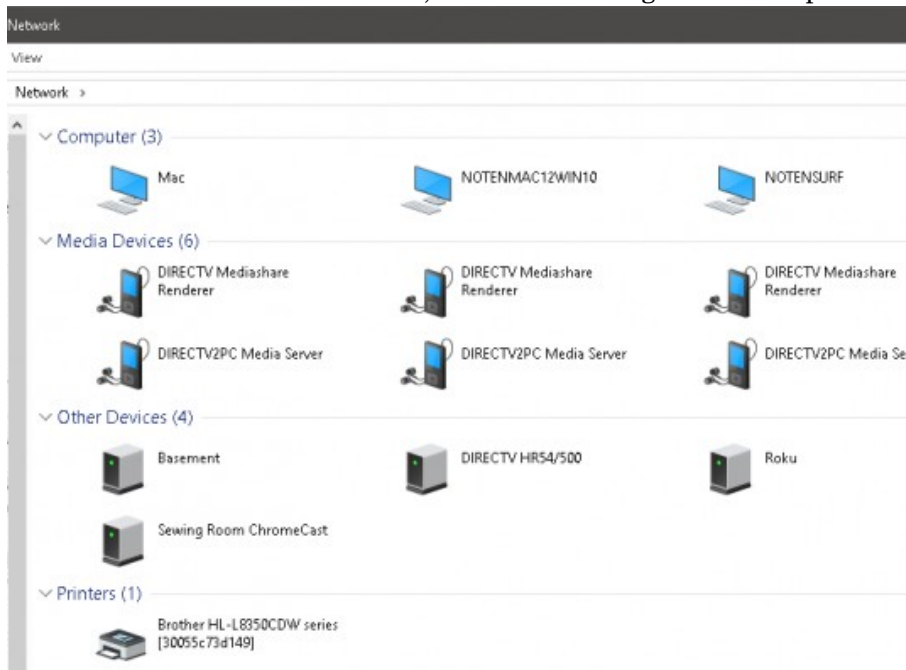
Almost everything impacts networking. Operating system versions, or even variations between flavors (like Windows Home and Pro) can make a difference. Setting consistent Workgroup names or log-in credentials can make things easier or harder. Occasionally there are obscure Windows settings you may or may not have direct access to alter.

Then there's the hardware: a wide variety of inconsistently-named devices called "access points", "routers", and "modems", that — regardless of name — can act as modems, routers, and access points ... or not. Add in cabling, wireless protocols, and more, and you've got a recipe for confusion that can stymie even the most patient user.

Heaven forbid you want cross-platform

Problems are, of course, multiplied dramatically should you want to connect devices using different platforms to interact. A Mac and a PC? Perhaps. Macs, PCs, and Linux machines? There are still connections I've yet to figure out how to make consistently across all my machines.

With the advent of additional networked devices, including gaming consoles as well as mobile devices and tablets, life continues to get more complex.



I still don't know why devices like my DirectTV receivers appear (twice each), why my Roku and ChromeCast devices appear, or what the device labeled "Basement" is at all! Not to mention that I have *many* more computers than the three that show up.

Homegroup was a start

I'll be honest, I never liked Homegroup. It was never enough, and it made too many assumptions. That being said, it was a solution that worked for many people.

So, while I didn't like it, I'm frustrated that Microsoft elected to remove the feature from future versions of Windows.

I would have preferred continued investment in Homegroup, or something built on it, that would make networking incrementally easier for more people in more situations.

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Computer Recycling

Some Residential Drop off Locations: **Call first**, to find out what is accepted, especially for 'tube type' tvs or monitors.

Town of Brighton, Semi-Annual Electronics Recycling and On-Site Residential Document Shredding, Saturday May 19, 2018, 9 am - 12 noon.

Bring your old electronic equipment and/or your old documents to Brighton's Electronics Recycling and Paper Shredding event (rain or shine). These two events will take place at the same time and place at the Highway Dept. Parking Lot, 1941 Elmwood Ave.

TSC Computer & Electronics Repair, accepts most electronic waste, including printers. Does not accept crt type monitors or tvs. They are located at 765 Elmgrove Road, Gates. 429-6880, www.tscelectronics.com

Instead, we're back to old, confusing, obscure networking tools.

There has been some improvement

I don't want to be all doom-and-gloom. It's important to recognize improvements have been made over the last decade.

Wireless networking, for example, was once *exceptionally* difficult, with little standardization, and operating system support that could be characterized as "bolted on" at best. Today it's natively supported, and for the most part, is something we typically assume will work, at least for direct Internet access.

Similarly, I've been particularly impressed with recent machine setups where networked printers magically appear as immediately available or as easily installed. That's a level of simplicity — or at least lack of undue confusion — that works well for what, under the hood, is amazingly complex.

So, why do I rant?

Why do I — a normally positive person who's amazed with technology and all the opportunities it can bring — turn so gloomy when it comes to networking? Why am I going on about how bad things are?

I want you to know you're not alone.

Networking is hard. It's complicated. It's fragile. It's frustrating.

When it works, it's powerful, magical, and can be exceptionally enabling.

But for the most part, getting to that point sucks.

And I want you to know that as you bang your head against some networking wall, *it's not you*. It's not your fault.

You're not missing something obvious. It really is that bad.

And it shouldn't be.

Maybe someday it'll get better, but I'm not seeing any relief on the horizon.

* * * * End of Article * * * *

New Method to Stop Cyber Attacks on GPS-enabled Devices

By Joanna Carver
University of Texas at San Antonio

Summary:

A new study describes a computer algorithm that mitigates the effects of spoofed GPS attacks on electrical grids and other GPS-reliant technologies. This new algorithm has the potential to help cybersecurity professionals to better detect and prevent cyber attacks in real time.

A new study by researchers Nikolaos Gatsis, David Akopian and Ahmad F. Taha and their graduate student Ali Khalajmehrabadi from the UTSA Department of Electrical and Computer Engineering describes a computer algorithm that mitigates the effects of spoofed GPS attacks on electrical grids and other GPS-reliant technologies. This new algorithm has the potential to help cybersecurity professionals to better detect and prevent cyber attacks in real time.

"Malicious agents have the ability to disrupt a device's understanding of time and location by emitting a signal that is pretending to be a GPS signal," Gatsis said. "This can be very harmful in several different realms of technology."

The U.S. electrical power grid, for example, depends on GPS to give time stamps for its measurements at stations across the country. Although reliable, researchers in laboratories across the world have shown that the system can be vulnerable to spoofing cyber-attacks that can disrupt the system's time and location data.

"In broad terms, malicious cyber-attackers can clone the GPS signal and display, for instance, the wrong time or the wrong location," Akopian said. "This can wreak all sorts of havoc. It can send people to the wrong location or render hours of data useless."

The trio's algorithm, which can be applied to cell phones or computers as easily as a new app, has the ability to recognize false GPS signals and counter an attack while it occurs. Their main focus has been preventing attacks on the American electrical power grid, but the algorithm is applicable to several different devices.

"As we move forward with this concept of driverless cars, it becomes much more vital that we secure our GPS signals because the hijacking of the location abilities of a driverless car could be very dangerous," Taha said. "Beyond that, cell phone towers and banks also use GPS signals. Every day, hundreds of thousands of measurements of time and location are made using this information -- and it's important to make the data secure."

Akopian, Gatsis and Taha's work is funded by a nearly \$400,000 grant from the National Science Foundation, which was awarded in 2017. They are now exploring plans to make their algorithm available in app stores for Android and iPhone users, as well as for larger devices like computers.

Reported in ScienceDaily, March 19, 2018. Source materials provided by University of Texas at San Antonio.

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

Facebook Extras

By Bob Schultz, Editor
Lake-Sumter Computer Society, FL

Facebook is either loved or hated by computer/smart phone users. Some think it is a way for people to show how important they are or how much "stuff" they have. Others believe it is a way to maintain or find lost friends. But either case there are hidden files you may like to know about. Here are five areas of concern Facebook has addressed.

1. Did you know that Facebook looks out for you by filtering messages that may be spam? You can check these filtered messages by going to the hidden file and if there are filtered messages you can access this folder by inserting the following address [<https://www.facebook.com/messages/>] into the browsers search bar. Click on the "clog" icon. This will open a window with several selections. Open "Connection Requests." In the next menu click on "See Filtered Requests". If Facebook detected any suspicious messages, they will be noted.
2. There is another feature Facebook uses to help control your privacy. It is a help that Facebook asks your permission to use a tag when someone tags you in a photo, but maybe you missed it and don't want it tagged. You can review these photos by checking you Activity Log.

To access the Activity Log, just click the "View Activity Log" button located on the bottom right side of your desktop cover photo. In the menu that comes up you can select what you want to see.

3. Have you ever been at a friend's house, used their computer on Facebook and realized when you got home you never logged out. Do not fear Facebook has made it possible to sign out from home.

Open Facebook and click on the drop-down arrow in the upper-right corner of the home screen and select "Settings". Next click "Security and Login". Look for the "Where You're Logged In". In this section, find the device you want to log off from by clicking the three vertical dots on the left side then select "Log Off."
4. For whatever reason you don't want anyone posting on your timeline but you. Simple. Go to "Settings" and then choose "Timeline and Tagging". Click on "Edit" on the "Who can post on your timeline" section and set to "Only Me".

5. If you do not care what anyone comments on a post, you can eliminate the notifications by turning off notifications for that post. To do this, just go to the post, then click on the little arrow pointer on the upper right corner of the post's header then select "Turn off notifications for this post."

From the October 2017 issue, NewsBytes, www.lscs.us, Editors@lscs.us.

Is your cell phone CDMA or GSM? - Should you care?

By Phil Sorrentino

Contributing Writer, The Computer Club, Florida

The short answer to the second question is "probably no," but there are some benefits from knowing the differences that may help you decide which cell phone provider or cell phone to choose. The answer to the first question depends on your cell phone provider. CDMA and GSM are the two basic technologies used in modern digital cellular networks, which are then used by mobile phones. These two technologies are very different. The difference is much more than the difference between a Ford and a Chevy. It's more like the difference between a gas-powered car and an electric vehicle; they both do the same thing, they get you to your destination, but the internal workings are very different. You can't use a CDMA phone on a GSM network (and vice versa), just like you couldn't use the gas engine from the gas-powered vehicle to run an electric vehicle. So, if you are on a CDMA network, you need a phone with CDMA radio-telephone circuitry, and if you are on a GSM network, you need GSM circuitry in your phone. So, which phones have what, may be a question you will have to answer when signing up for your next cell phone plan.

Although there are many places to buy a cell phone, in the United States there are only four major cell phone networks. (US Cellular is actually a fifth, but much smaller network.) The four are Verizon, AT&T, Sprint, and T-Mobile, and they are evenly divided by the technologies used. Verizon and Sprint use CDMA and AT&T and T-Mobile use GSM. (US Cellular uses CDMA.) CDMA stands for Code Division Multiple Access and GSM is short for Global System for Mobile (*Communications*), both of which are terms used to represent the collection of many radio-telephone technologies that comprise the two different systems. CDMA actually describes the technology that is used to keep separate all the data channels that use the same wireless frequency band. Whereas GSM is the name of a standard used to describe the protocols used in digital cellular networks. But then, what is in a name? A rose, by any other name, would still be a rose. By the way, most of the world outside the US uses GSM, so if you need to use your phone over-seas, it will probably have to be compatible with GSM. This is another example of how an open standard can dominate over a proprietary product (think Android over iOS). GSM is an open standard, developed by the European Telecommunications Standards Institute, whereas CDMA is a proprietary technology developed and owned by Qualcomm. (Just to be complete, GSM uses a Time Division technique for keeping channels separate.)

Another difference you may be already be aware of, is the SIM card, or Subscriber Identity Module. GSM uses a removable SIM card as a container for customer information. CDMA does not typically use a SIM card. The SIM card is an integrated circuit chip that is intended to securely store the International Mobile Subscriber Identity (IMSI) number and its related cryptographic key, both of which are used to identify and authenticate subscriber devices. It's much easier to change phones on GSM networks, because of the removable SIM card. Just take the card out, put it into another phone, and the new phone now has your number. CDMA networks use a different technique to identify and authenticate subscriber devices. CDMA uses a network based database. The phone information has to be put into a "white list" database, that is then used to control access to the network. If you have a CDMA phone with a SIM card, it may be there to support foreign GSM networks and the phone may be called a "world phone" (which may be good to have if you travel a lot). You may also find a SIM card in a newer CDMA phone. It may be there to support the newer faster 4G LTE networks, because SIM cards are part of this new standard. Where did 4G LTE come from?, you might ask. Well, so far, we haven't said anything about network speed and that is what 4G LTE refers to.

Most current networks operate at a 3G speed, which translates to a data rate of around 1-2Mbps. 3G has been in use since about 2003. The G only indicates Generation. The 4th Generation or 4G provides an almost 10 times increase in speed, so 4G will move data at around 10Mbps. The LTE indicates "Long-Term Evolution", which is a standard for high-speed wireless communications for mobile phones and devices. LTE is the upgrade path for both GSM and CDMA networks. (By the way, 1G was for analog cell phones and 2G was

for early digital cell phones.) So now many phones have the appropriate hardware and software that enable them to operate on both 3G and 4G networks of their specific type of network, GSM or CDMA. The cost of a phone that can operate on the 4G network will be higher than a phone that can operate only on the 3G network. (There are many technical details defining and describing the 3G and 4G and even the future 5G standards but I have simplified things so as to not get bogged down in those voluminous and sticky details.)

All of the four major networks have 4G, so if money is not an issue, a 4G phone would be advisable. Also, if you spend a lot of time on the web or regularly stream video, 4G might just be worth the extra phone cost. So, in general, if you expect to transfer large amounts of data, 4G is definitely worth it, but keep in mind that it is very easy to go over your data plan limit when you are working at the higher speed. Finally, if you want to future-proof your phone, get a 4G phone. 4G is only going to get better because that is where network operators are spending their money. Also realize that a 4G phone is backward compatible and will operate on 3G and even 2G networks. You still might consider only a 3G phone if you don't have a need for the faster data rate of 4G, and/or you use it mostly for voice. Also, if you live in an area that doesn't have 4G yet, the 3G phone might be just fine. So, in the long run, you should probably care about the network type so you can make an informed decision the next time you have to buy a phone or phone plan.

From The Journal of The Computer Club, Inc., <http://sccccomputerclub.org> / Philsorr.wordpress.com, philsorr@yahoo.com.

Be Your Own Mechanic with FIXD

Review by Bob Schultz
Editor, Lake-Sumter Computer Society

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.



From the October 2017 issue, NewsBytes, www.lscs.us, Editors@lscs.us.

Tidbits of probably useless information

Until the nineteenth century, solid blocks of tea were used as money in Siberia!

The Nobel Peace Prize medal depicts three naked men with their hands on each other's shoulders!

When glass breaks, the cracks move faster than 3,000 miles per hour.
To photograph the event, a camera must shoot at a millionth of a second!

A Boeing 747 airliner holds 57,285 gallons of fuel!

A car uses 1.6 ounces of gas idling for one minute. Half an ounce is used to start the average automobile!

No Personal Privacy

By Matt Batt
President, The Computer Club, Inc., Florida

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.

1. 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.

2. 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>.

3. On a more fun note, I've been sharing a website called 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!

From the December 2017 issue, The Journal of The Computer Club,
www.sccccomputerclub.org, mbatt453@gmail.com.

***** TECH CORNER *****

Criminals Have Found a Way to Replace the Chips on Credit Cards

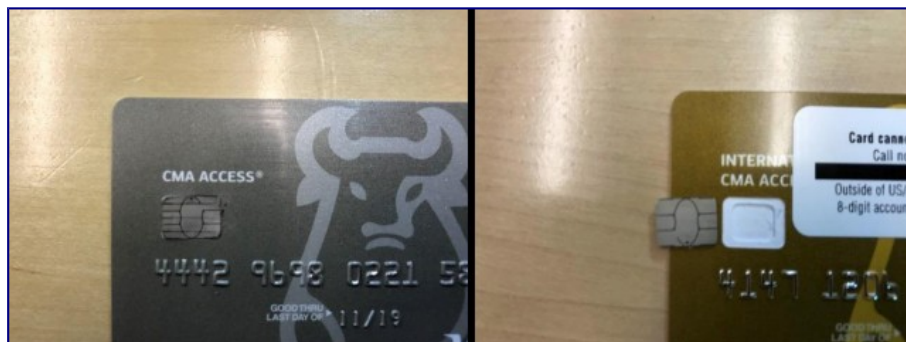
By Joel Hruska

Over the past few years, credit card terminals and users across the US have been transitioning from the old style of credit and debit cards to the newer EMV standard, also sometimes called chip-and-pin. The point of chip-and-pin is to create a newer banking standard that's more resistant to fraud and abuse, particularly cloning. But the standard was never going to comprehensively protect against everything, a point jammed home now that credit card thieves are going after major corporations with a rather clever attack.



Here's how PCMag describes the process: First, the thieves intercept a large run of cards, which companies typically order in bulk for many users at a time. Then, they remove the chips from the cards using a heat source and solder bad, dummy chips on. The new cards look legitimate, and can be activated, but they won't actually work, since the chips don't match the cards they're attached to.

But you know what *does* work? The original chips that have now been activated by the account holder. The associated accounts can now be drained. Replacing the original chips opens up a much larger window before anyone realizes that the card has been stolen, particularly if the recipient activates the card but doesn't necessarily use it



very often. It could take days before the actual bait-and-switch is discovered. The image below is intended to help users spot counterfeit cards and was provided by the US Secret Service:

The scheme relies on the end user actually activating the credit card, because without that activation, the interceptors/thieves can't pull off the scheme. It's not clear how thieves are intercepting the parcels in the first place. This could mean that US Postal Service employees or a delivery service are helping with the theft.

The Secret Service, for those of you who did not know, is the federal law enforcement agency tasked with tracking down and preventing counterfeiting. In fact, it was on these grounds, rather than the protection of the President, that the Secret Service was created in 1865. Up to one-third of American currency in circulation following the Civil War was believed to be counterfeit, which puts some concrete size to the problem. It was only after President McKinley's death that Congress made protection of the president one of the USSS primary responsibilities.

So far everything we've heard suggests corporations, not individuals, are the targets here, but be careful with your card activations. **It might be wise to activate the card in an ATM and, if it cannot successfully complete transactions, warn your bank immediately.** Waiting gives criminals the opportunity to empty your account.

As reported in ExtremeTech, on April 9, 2018.

3 Ways Minnesota Soybean Farmers are Helping Clear the Air

reported in BrandPoint, Feb 13, 2018

Soybean farmers in Minnesota wear many different hats: small-business owner, agronomist, equipment expert, accountant and environmentalist. Yes, they are the original stewards of the land, continually evolving their practices to keep natural resources healthy for the next generation.



But it doesn't end there. Soybean farmers have been at the forefront of developing a homegrown renewable fuel that has resulted in a dramatic improvement of the air quality in the Gopher state.

Biodiesel has become an important part of the energy landscape not only in Minnesota, but across the country, too. In just over 15 years, the biodiesel market in the U.S. has increased from about 25 million gallons to more than 2.8 billion gallons. Made from domestic, renewable resources such as soybean oil, biodiesel is a value-added by-product containing sources that would normally go to waste.

You may be scratching your head and saying, "I don't drive a diesel vehicle. Why should I care?" Well, you're not alone. According to the Bureau of Transportation Statistics, diesel-powered cars accounted for only about 3 percent of total U.S. auto sales in 2014.

But, unless your family continues to rely heavily on the moped for travel and commerce, here's why biodiesel matters.

Diesel engines are all around you

According to the Diesel Technology Forum, more than 95 percent of all large, heavy-duty trucks are diesel-powered, as are a majority of medium-duty trucks. Together, they move more than 90 percent of the nation's freight. And don't forget public transit, school buses and construction equipment. Things we all come in contact with every day.

Waving the green flag

And while you may think these trucks' massive diesel engines are an unfortunate but necessary aspect of commerce and expansion, think again.

According to the American Lung Association of Minnesota (ALAMN), during the 10-year period with biodiesel as a

fuel standard for Minnesota, a reduction of more than 7.4 billion pounds of carbon dioxide has already been realized. ALAMN estimates that is comparable to removing the emissions from 706,649 passenger vehicles or 17,998 railcars of coal.

That's not a typo. Removing emissions. Breathing easier. Biodiesel's ability to reduce greenhouse gas emissions by more than 50 percent is why the Environmental Protection Agency recognizes it as the only advanced biofuel.

Revitalizing rural communities

According to the Minnesota Department of Agriculture, the biodiesel industry contributes \$1.7 billion annually in the state, while supporting 5,397 jobs. Nationwide, there are approximately 200 biodiesel plants, which provide nearly 48,000 jobs. These are often hard-hit areas where employment options are few. Leaving for "greener pastures" is no longer the only option.

"Biodiesel is another step in increasing the diversity of our energy needs," says Tom Slunecka, CEO, Minnesota Soybean Research and Promotion Council. "Minnesota soybean farmers are proud to be leaders in growing that diversity."

In 2002, Minnesota became the first state to require that all diesel fuel sold here contain at least 2 percent blend of biodiesel. In the summer of 2018, Minnesota will be the first to move to B20, a blend of 20 percent biodiesel and 80 percent petroleum diesel.

The benefits of biodiesel are considerable, not just for Minnesota, but for the country as a whole.

To learn more about biodiesel, visit www.mnsoybean.org.