



An International
Association of Technology
& Computer User Groups

Our Club

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

Program Meetings

No admission fee for non-members. Everyone is

welcome! Second Tuesday of every month, except August, from 6:30pm – 8:30pm.

Help's Half Hour (Q & A)

6:30pm – 7:00pm. *Members and Guests are welcome to attend and bring their computer related questions with them to get answered.*

7:00 – 7:15, Club Business

7:15 – 8:30+, Main Presentation

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

Become a Member

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

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

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



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Rochester, NY

May 2020

Tuesday, May 12, 'To Cloud or not to Cloud'
presented by David Williams, **via Zoom**

Tuesday, June 9, TBD
by Arpad Kovacs

Tuesday, July 14, TBD
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Jim Sanders

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www.geeksonatour.com

Bits and Pieces in the News

RCSI editor

Brainwave-Controlled Devices

Machine Learning to Discover Coronavirus Treatments

USA has led science research for 75 years

URMC_Clinical Trial for New COVID-19 Treatment

Club and Regional News

5G is Coming

By Jeff Wilkinson, President
Sun City Summerlin Computer Club

5G is the designation for the upcoming fifth-generation cellular network technology. This technology, which had the standards set at the end of 2017, promises to bring faster speeds than the current 4G technology in use by most cell phones today. This technology will not only affect your cell phones, tablets, and laptops, but also the myriad of other connected devices such as door locks, autonomous vehicles, security cameras, home appliances, and many more devices included in the IoT space – Internet of Things!



“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.

Free copies of the RCSI 'Monitor' newsletter can be found in the following computer stores: Microworx, TSC Electronics, Pod Computers, and Just Solutions. Digital copies may be obtained from www.rcsi.org or my Pcloud storage at <https://tinyurl.com/tonydelrcsi> (this link works on PDF version only). Also includes presentation slides and articles too large for this newsletter.

Some Past Presentations:

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

It's estimated that over 20 billion devices will be connected to the Internet by the end of 2020, up from the 6 billion plus currently connected. The promised latency (the delay in sending data from one point to the next) reduction of 5G is critical to the growth of driverless vehicles and many other applications.

Shipments of 5G smartphones will surge to more than 100 million units by the end of 2020 as the coverage of 5G networks grows and the premium prices of today's handsets come down, according to a [report](#) by International Data Corporation. IDC said that next year 5G handsets could account for close to 10% of global volumes, which have been hammered in recent years by consumers taking longer and longer to upgrade to new models.

Driverless Cars and 5G Technology

For autonomous car technology to be unlocked, many experts agree that large-scale adoption of 5G is required. If you've been following the news about 5G, you know that it has the potential to significantly boost bandwidth up to 10 Gbits/sec. It also has sub-1-millisecond system latency paired with a considerable reduction in power consumption over existing networks. 5G will enable a host of new applications in the Industrial Internet of Things (IoT), vehicle-to-vehicle communication, virtual reality, and artificial intelligence applications.

Said Nokia's Jane Rygaard in a [recent interview with the BBC](#): “We need to look at how long it takes for the message to be transmitted between sensors and then get to the computer in each car, and then how long it takes for the computer to make a decision, and all of this has to be in less time than a human would take to make a decision—2 milliseconds. We need a network supporting this, and 5G is that network.”

Still, with self-driving features already in widespread use, it does appear that fully autonomous cars will appear on our roads, and perhaps sooner than people realize. Even more surprising, they will also be considered much safer than human-controlled vehicles. The current 4G network is fast enough to online stream full HD content and play online games, but it can't support safer and smarter [autonomous cars](#). Autonomous cars, systems require incredible data processing capabilities and speeds to mimic the timing of human reflexes.

The rollout of 5G technology is likely to begin in high usage areas and will certainly experience some growing pains, but it is coming.

From the October 2019 issue, The Gigabyte Gazette, www.scscclub.com, clearmeadows11@gmail.com.

Editor's note: For a more detailed explanation of what 5G is, Ron Brown did a great job explaining about this technology at the February 2020, Apcug VTC. This link is from the Apcug Youtube channel, www.youtube.com/watch?v=as8bcEnUpgM

Final 'Hard Copy' Newsletter Printing

The final *hard copies* of the 'Monitor' newsletter, currently being distributed to some of the computer stores, will end with the June issue. New digital copies will still be posted to the club website.

Special Interest Group

Linux Sig

We are back!



Linux Workshop,
third Saturday of the month
Sat, March 21, Noon-4PM

NEW LOCATION:

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

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

<https://www.meetup.com/Interlock-Rochester-Hackerspace/events/psggnqybccbxb/>

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

Carl Schmidtman

Free, Virtual Technology Conferences, ONLINE
presented by APCUG

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

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

A Recent Scam Experience

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

Recently I received the “Social Security” scam call, the recorded message informing me that I should call an 800 number because my account was about to be suspended. I decided to play along and see what the suspected scam pitch was; since I was 99.99% sure that Social Security doesn’t call you.

I called the 800 number, exclaimed my surprise that there was a problem and breathlessly asked what the problem was. The responder, “Officer Ronald Smith” explained, in an almost unintelligible accent, that he was a senior investigator and I should get a pencil and paper and write down his name and badge number, which he proceeded to give me. He then went on to outline the “problem” which included seven bank accounts opened under my social security number. He said the accounts had been used for money laundering and an investigation was underway with an arrest warrant about to be issued. In addition, there were multiple credit cards also under my social security number which had been linked to illegal activity.

“Officer Smith” then asked if these were my accounts. Upon my answering No, he explained he needed to know how many bank accounts and their approximate balance and how many credit cards I had and their credit limits. I responded with fictitious information of course. He advised me that this conversation was being recorded and I was repeatedly told to listen to his instructions very carefully. When I told him in a frightened, exasperated voice that the accounts he described were not mine, he wanted the local police department phone number so he could call to see if we could clarify some additional information. I gave him a fake phone number and he put me on hold; he came back a short time later and said that the number I gave him was incorrect!

“Officer Smith” then told me I could get the number from the yellow pages or Google and said he would wait while I looked it up. When I asked why *he* didn’t have it, he exclaimed he did but was not allowed to give it to me. I looked up the number in the city I had claimed to live in and gave it to him; he again put me on hold and returned a couple of minutes later. He said he had a senior investigator on his other line, and she would be calling me. I was to put him on hold when she called. Then my phone rang! The call was from the number I had provided which was the number of the Palo Alto, CA police department! “Officer Smith” told me to put him on hold and to add the new caller to the conversation.

Throughout this entire 22-minute ordeal he had not yet asked for any money or access to my computer. I was tempted to continue the charade, but the language barrier became intolerable along with the level of minutia, so I ended the calls. Almost immediately my phone began ringing from an unknown 800 number, over and over until I blocked the number. I believe the ploy was to obtain my information such as date of birth, address and social security number so they could steal my identity.

Although I didn’t get far enough to determine the full scam, I was very surprised that they added so much credibility by calling me back and “spoofing” (faking the Caller ID) of the actual police department number

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Planning Meeting

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

Newsletter Printing

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

Club Mailing Address

Rochester Computer Society, Inc
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Rochester, NY 14624

I had provided and they had checked! As we know, spoofing a phone number occurs often on junk and scam calls. This specific trick could cause a reluctant mark to falsely think they were maybe being too cautious. The scammer may attempt to retrieve your date of birth, name, address and partial social security number by asking throughout the conversation for you to verify the information. With those items, it is possible to initiate a change of address and phone number with Social Security and then redirect your direct deposit to a different bank.

Having repaired two cases of scammers gaining access to computers that week, one which was able to gain bank information and withdraw a four-figure sum of money from a retiree, I was interested in experiencing the actual pitch. It can't be stressed enough that allowing remote access to your computer from random phone calls, emails or web page screens is to be avoided. Also ***do not release any personal information to unknown callers, no matter how official they attempt to sound***, with so much information available in the public domain, many times only a small amount of additional information is needed to initiate an identity theft.

From the December 2019 issue, The Gigabyte Gazette, www.scscclb.com,
Clearmeadows11@gmail.com.

Do You Know the Signs of Identity Theft?

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

Nobody wants to be a victim of identity theft, but if you're lucky, you'll know immediately when your identity has been stolen. A missing wallet or purse sets off an instant alarm. But many victims of identity theft don't learn of it until months after the fact, when enormous damage has been done to their finances and credit. Here's what to look for if you're concerned about possible identity theft...

Has Your Identity Been Stolen?

In some cases, the tipoff comes when you start receiving bills for things you did not buy. Even if your credit cards are still safely in your pocket, the information on them may be used to buy things online. Given the right personal information, identity thieves may open charge accounts, utility accounts, and unsecured loan accounts in your name. Often they use a billing address different from the victim's, so the first notice the victim receives is a call from a collection agency. By then, the victim may be on the hook for thousands of dollars with dozens of creditors. And the scammer could be long gone.

The first thing to do when you suspect that your identity has been stolen is to file fraud alerts with all of your financial partners and the major credit bureaus. Here are links and phone numbers for the credit bureaus. Equifax: 888-836-6351; Experian: 888-397-3742; TransUnion: 800-680-7289. You don't need to contact all three credit bureaus to place a fraud alert. The Fair Credit Reporting Act requires each of them to notify the others of the alert.

Fraud alerts expire after 90 days, but you can renew them. A fraud alert doesn't prevent you from opening a new credit account if needed. It

Tidbits of probably useless information

The most common street name in the U.S. is *Second St.*.

The longest snake is the Royal Python which can grow to 35 feet.

No matter where you sleep, you swallow an average of 8 spiders a year.

The tallest free standing statue in the world is Chief Crazy Horse at Thunderbird Mountain, South Dakota.

The Quahog clam is the longest living animal, with a maximum age of up to 200 years old.

It's easiest to become a millionaire in Angola, where \$10.54 converts to 1 million units of New Kwanze currency.

The highest scoring word in Scrabble is "quartzly" at 164 points.

The smallest country in the world is Vatican City.

The three most popular dog names, in order, are: Lady, King, and Duke.

The Netherlands is the most candy eating country in the world, with each person averaging 30.63 lbs. per year, compared to the U.S. at 17.86 lbs.

The biggest olive is the colossal olive.

The country with the most annual tourists is France.

does require creditors to do "due diligence" which means they have to contact you to make sure you really are the one trying to open an account.

Fraud Alert or Credit Freeze?

You can also request a "credit freeze" from each of the credit bureaus, which prevents anyone - including you - from obtaining new credit in your name. A credit freeze will prevent new accounts from being opened, because it blocks lenders from checking your credit. A credit freeze won't stop you from opening a new account, but you will have to lift the freeze temporarily.

Unlike fraud alerts, you must contact each credit bureau ([Equifax](#), [Experian](#), and [Transunion](#)) to initiate a credit freeze. You'll need to supply personal information including your name, address, birth date, and Social Security number. When the freeze is done, you'll get a PIN or password from each of the credit bureaus, which you can use if you need to temporarily lift the freeze.

A credit bureau must lift a freeze within one hour, if you request it by phone or online. Requests made by mail can take several days. Ask which credit bureau the lender will be contacting, so you don't have to unfreeze all three of your credit reports.

Get Your Free Credit Reports (and Your Credit Score)

The credit bureaus are also required to give victims of identity theft free copies of their credit reports. (See my related article [Free Credit Reports Online](#) for more info.) These reports can help you discover unauthorized applications for credit made in your name.

Even if you're not concerned about possible identity theft, you can get FOUR credit reports every year for free. The link above will show you how it's done, how to avoid the potential pitfalls. And on a related note, do you know how a credit SCORE is different from a credit REPORT? See my article [Here's How to Get Your Free Credit Score](#).

Minimizing the Damage of Identity Theft

If your credit card is lost or stolen, you must report it immediately. Once you have reported your credit cards stolen, you will not be liable for any additional charges that may be made with them. Use these phone numbers to contact the credit card companies:

- American Express: 800-297-7672
- Discover Card: 800-347-2683
- MasterCard: 800-622-7747
- VISA: 866-434-6854

Next step: File a police report. Although local police have little power to track down identity thieves across the country, a police report is generally required by other entities when you are trying to repair your credit record.

Contact your State's department of motor vehicles to see if anyone has tried to obtain a driver's license in your name. Do likewise with the Social Security Administration (800-772-1213). Request a copy of your Social Security earnings history to ensure that it is correct. It's not uncommon to find that someone else is working under your name.

Jere's Tech Tips

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

HOW TO MANAGE TRACKING PREVENTION IN MICROSOFT EDGE

(MICROSOFT BROWSER) –

One of the selling points of the new Microsoft Edge is its focus on privacy and tracking prevention. Here's a look at what tracking is and how to manage the tracking prevention settings in Edge.

What is Tracking?

Websites use tracking mechanisms to collect data about your browsing, likes, clicks, and shopping habits to serve up personalized ads. In fact, trackers can collect data about you across multiple sites. Even ones you haven't visited. That's why it seems like ads for a product or service are following you around online. And some trackers can be harmful. Ones that are detected as crypto-mining or fingerprinting in the background. Not only do trackers have privacy implications, but they use up system resources.

Go to this Groovy Post web page and get the facts.

<http://bit.ly/2RreevO>

HOW TO MAKE THE SWITCH FROM WINDOWS TO LINUX –

If you don't want to upgrade from Windows 7 or are sick of Windows 10, read this PC Mag article on how to finally make the switch to Linux and install apps.

<http://bit.ly/366JFAA>

If you're positive you have been a victim of identity theft, you should close all of your existing credit card accounts immediately. Replace them with new ones if you can. Ask your bank if closing your checking or savings account is a good idea as well.

Change all of your online passwords, even if they are not associated with financial accounts. Be sure to choose strong passwords with a mixture of upper and lower case letters, digits, and special characters. See my related article [Is Your Password Strong Enough?](#) for help selecting a good password.

A credit monitoring service may seem like a good idea right after you've been victimized by identity theft. Such services charge a monthly fee of \$10 to \$15 to monitor your credit records and alert you of any unusual activity. But they don't prevent identity theft; they only alert you to a problem after you have one. Yes, they will file all of the alerts mentioned above with credit bureaus and card companies, but you can do that yourself.

And credit monitoring services won't do the heavy lifting of defending you against fraudulent debts or rebuilding your credit. Most consumer advocates consider credit monitoring services to be a waste of money.

###

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

Google Apps Made Easy - Learn to Work in the Cloud

By Terry Flanagan, Club Librarian
GVR Computer Club, AZ



Just added to the club library is *GOOGLE APPS MADE EASY – Learn To Work In The Cloud*. Google Apps is Google's response to Microsoft Office and LibreOffice. The table below lists the various functions and the names used.

FUNCTION	GOOGLE APPS	M/S OFFICE	LibreOffice
Word Processing	Docs	Word	Writer
Spreadsheet	Sheets	Excel	Calc
Presentation	Slides	PowerPoint	Impress
Database	N.A.	Access	Base
Forms	Forms	N.A.	N.A.
Note Taking	Keep	OneNote	N.A.
Photo Organizing	Photos	N.A.	N.A.
Vector Graphics	N.A.	N.A.	Draw
Email	Gmail	Outlook	Thunderbird
COST	Free	\$100/yr.	Free

Scam Alerts

Foreign Currency Scam -

Investments in foreign currency can sound like a great idea, and scammers frequently use real current events and news stories to make their pitches even more appealing. They advertise an easy investment with high return and low risk when you purchase Iraqi Dinar, Vietnamese Dong or, most recently, the Egyptian Pound. The plan is that, when those governments revalue their currencies, increasing their worth against the dollar, you just sell and cash in. Unlike previous hoaxes, you may even take possession of real currency. The problem is that they will be very difficult to sell, and it's extremely unlikely they will ever significantly increase in value.

Scam Text Messages - It looks like a text alert from your bank, asking you to confirm information or 'reactivate your debit card' by following a link on your smart phone. But it is just a way to steal personal information.

Affordable Care Act Scams (ObamaCare) - Scammers love the Affordable Care Act ('Obamacare'), using it as a way to fool Americans into sharing their personal information.

Casting Call Scam - Scammers pose as agents or talent scouts looking for actors, singers, models, reality show contestants, etc., and use phony audition notices to fool aspiring performers into paying to try out for parts that don't exist.

Recovery/Refund Companies
A scammer contacts and claims you owe money on a debt or the scammer offers to recover money lost in a previous scam.

What makes Google Apps different? First and foremost, Google Apps are web based. You do not download and install a program on your computer. You use your web browser, preferably Google Chrome, to go to www.google.com and log into your account and there they are. You do not have to be concerned with updates, maintenance, and backup issues. They are also platform or operating system independent. It does not matter if you are using a M/S Windows, Apple MAC or Linux computer, an Android smart phone, iPhone or iPad. The applications and your files are there in the cloud for you to access from wherever you are.

There are several advantages and disadvantages to working in the cloud. Being on the cloud makes it easier to share your files with others, which makes collaboration easier. There is no need to send email attachments back and forth or copy files onto flash drives. Also, all of your data will be consistent between your devices. If you make changes in Google Docs on your PC and later open the file on your iPad the changes are there. Even if you save the file locally to your computer it will be synchronized to the cloud version. The disadvantages are that ***you must have an Internet connection*** since most of the things you will do with these apps are cloud-based and done online. The applications do not have as many features as the other office suites and some may have security concerns about their data being on the cloud.

From the chart above, you will note that each office suite has applications that the other does not. Google Apps does not have a database module, but this is not a frequently used application by home users. Many common database functions can be handled by a spreadsheet. M/S Office and LibreOffice do not have a photo editing module, but there are a number of good stand-alone programs to perform those tasks.

Google Forms stands out as a unique application. Forms does what the name implies. You can easily create forms to gather information or take surveys. The data is automatically transferred to a spreadsheet and reports created to summarize the results and display them in easy to understand charts.

One final point to mention – notice the bottom line in the chart above. Google Apps are free along with 15 gigabytes of cloud file storage. More space is available for a fee.

From the issue of October 2019 issue, Greenbytes, www.ccgvas.org,
Newsletter@ccgvas.org.

A DVI Story

by Jim Sanders, Director
North Orange County Computer Club, CA

Sometimes learning experiences occur for simple reasons. This particular learning experience happened because of the way I organized my test bench. This experience revolves around the video interfaces on the computers that most of us use. You know, the connection to the monitor that puts the pretty picture on the display. In particular, the VGA port, the DVI-I port and the connectors they use. Just to refresh your memory on what those acronyms stand for:

Some Interesting Websites and Internet Finds

by Steve Costello
scostello@sefcug.com

How To Clear Browser Cache In All Web Browsers

<https://www.fossmint.com/clear-your-browser-cache/>

There are times when the browser cache needs to be cleared. This post gives clear instructions on how to do it in Google Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera.

Exercises For Computer Users And Office Workers – Nerd Fitness

<https://www.thewindowsclub.com/exercises-for-computer-users>

As a computer user, I sometimes forget to get enough exercise. If the same is true for you, check out this post for some quick and easy suggestions to keep fitter.

Do You Need A 4K HDMI Cable?

<https://www.techhive.com/article/3330376/do-i-need-a-4k-hdmi-cable.html>

Just get a 4K TV for the holidays? Check out this post before going out to spend lots of money on a special 4K HDMI cable.

How To Encrypt A Flash Drive Without Bitlocker

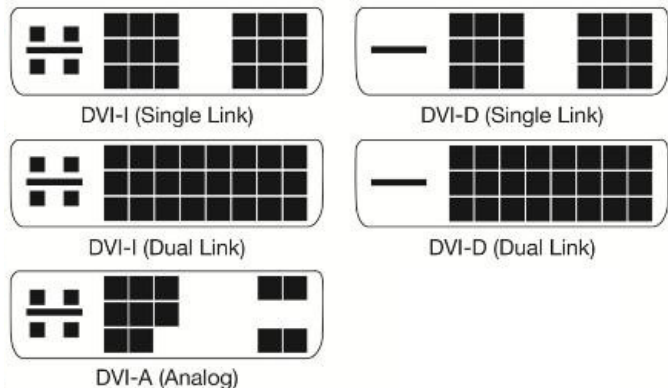
<https://www.techtricksworld.com/how-to-encrypt-a-flash-drive-without-bitlocker/>

If you want to encrypt a flash drive and don't have a version of Windows that includes Bitlocker, check out this post for some alternative methods.

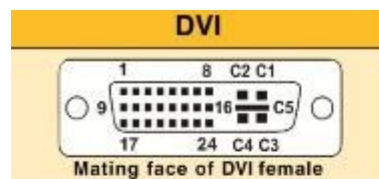
VGA stands for "**V**ideo **G**raphics **A**rray." The VGA standard was originally developed by IBM in 1987 and allowed for a display resolution of 640x480 pixels. Today, it typically supports up to **1080p**. The quality of the signal begins to drop off above 1920x1080 (**1080p**) which **will** cause a drop in image quality due to the analogue nature of the signal. With a good enough cable (shorter is better) and transceiver on either end it **can** be used for resolutions up to and including 2048x1536, your mileage may vary.

DVI stands for (**D**)igital (**V**)ideo (**I**)nterface. It is a video display interface

developed by the [Digital Display Working Group](#) (DDWG). The [digital](#) interface is used to connect a video source, such as a [video display controller](#), to a [display device](#), such as a [computer monitor](#).



It was developed with the intention of creating an industry standard for the transfer of digital video content.



PIN#	SIGNAL	PIN#	SIGNAL
1	T.M.D.S DATA 2 -	16	HOT PLUG DETECT
2	T.M.D.S DATA 2 +	17	T.M.D.S DATA 0 -
3	T.M.D.S DATA 2# SHIELD	18	T.M.D.S DATA 0 +
4	T.M.D.S DATA 4 -	19	T.M.D.S DATA 0# SHIELD
5	T.M.D.S DATA 4 +	20	T.M.D.S DATA 5 -
6	DDC CLOCK	21	T.M.D.S DATA 5 +
7	DDC DATA	22	T.M.D.S CLOCK SHIELD
8	ANALOG VERT. SYNC	23	T.M.D.S CLOCK +
9	T.M.D.S DATA 1 -	24	T.M.D.S CLOCK -
10	T.M.D.S DATA 1 +		
11	T.M.D.S DATA 1# SHIELD	C1	ANALOG RED
12	T.M.D.S DATA 3-	C2	ANALOG GREEN
13	T.M.D.S DATA 3+	C3	ANALOG BLUE
14	+5V POWER	C4	ANALOG HORZ SYNC
15	GND	C5	ANALOG GROUND

This interface is designed to transmit [uncompressed](#) digital video and can be configured to support multiple modes such as DVI-A (analog only), DVI-D (digital only) or DVI-I (digital and analog). The single link DVI-D can produce a near perfect 1920x1200 ([WUXGA](#)) image @ 60Hz on displays and the dual link a near perfect 2560x1600 ([WQXGA](#)) image @ 60Hz on displays.

In order to reduce the clutter around the test area, I bought a very flexible, small diameter, VGA cable to hook the 1920 x 1080 monitor to whatever computer I was working on at the time. Depending on age and other factors,

most end-user computers have either VGA only ports, or DVI-I only, or both. For computers that only have one of the three Analog capable DVI connectors, I have acquired the three different DVI to VGA adaptors. Newer computers may have HDMI and/or Display Port ports as well.

One of the learning experiences here was that I didn't need three DVI to VGA adaptors, just one, the DVI-A pin out adaptor. The female, Analog capable, DVI connector that is on any one computer, can be one of the three shown in the diagram. As you can see in the above chart, the DVI-A will mate with the other two pin outs. The other two pin outs have limits.

Penguin Platform

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

TRY THESE 2 THINGS BEFORE CHOOSING YOUR DESKTOP LINUX OS

– When macOS users decide “OK I’m done with the Apple ecosystem” and switch over to Windows, they have basically one choice for their operating system: Windows 10. When the reverse happens, people diving into Macs also have a single choice. When you take the plunge into desktop Linux, your “distribution” options expand exponentially. It can be overwhelming. Choice is the most beautiful — but sometimes paralyzing — thing about the wonderful world of Linux. If you’re curious about making that jump, wait until you’ve checked out these two fantastic resources. <http://bit.ly/2HzvWRQ>

TIMEKPR-NEXT IS A LINUX PARENTAL CONTROL PROGRAM FOR LIMITING COMPUTER USAGE

– Timekpr-nExT is graphical parental control tool for Linux, useful if you want to limit child activity on a computer. The application, which uses Python / GTK3, works with multiple desktop environments, including GNOME, Xfce, Cinnamon, KDE Plasma, Unity, Deepin and Budgie, under both X11 and Wayland. The application can limit computer usage for some user accounts by setting predefined access rules. Find out how to set this up with this article from Linux Uprising: <http://bit.ly/2DuzPvy>

A second learning experience had to do with my long-term assumption (remember the definition of assume!) that contained within the DVI to VGA adaptor was a clever little integrated circuit that did the conversion. WRONG! Heretofore, I had not bothered to look up WHY there are different pin outs on DVI connectors. I just acquired the right cable or adaptor that worked with a given system. If it mechanically mated and electronically worked, life was good. When I was forced to research my problem, it only took a view minutes on Google to learn the facts of DVI life. Whereupon, I really felt the weight of one definition of assume! If that is confusing go here:

<https://www.urbandictionary.com/define.php?term=Assume>

A DVI to VGA adaptor doesn't contain a clever little IC that converts the digital signal to an analog signal. That clever little IC (that contains



DACs, Digital to Analog Converter) is on the Motherboard or Video Card and makes the analog signals available on pins of the DVI connector. The only adapting the DVI to VGA adaptor does is to run wires from the correct pins on

the DVI connector that contain the analog video signals, to the appropriate pins on the VGA connector.

What precipitated this learning experience? I was upgrading a client’s computer to a new RX 570 video card which has Display Port, HDMI and DVI-D connectors. My test monitor only has VGA and DVI-I dual link connectors. If you look at the chart, it is obvious that none of my DVI to VGA adaptors can plug into a DVI-D female connector. Not to mention, there are no analog signals in a DVI-D connector anyway! It turned out that I had 4 DVI cables of differing lengths in stock, but all of them were DVI-I dual link cables. It being late and wanting to finish the job, I figured what the hey, I will modify one cable by breaking off the four pins surrounding the blade that keep it from mating. I did that and it still would not seat in the DVI-D connector. Looking closely, I could see that the blade in a DVI-I male connector is wider than the female slot in the DVI-D connector on the RX 570 video card. A little grinding with the Dremel tool and it slid right in and worked.

A few tidbits: The digital video signals in an HDMI connector are the same as DVI-D which makes it easy to make an adaptor cable you can buy for under \$10. HDMI connectors come in three sizes, standard, mini, and micro. An HDMI 2 in 1 T Adapter Connector Female To Mini HDMI Male And Micro HDMI Male Adapter is handy for connecting phones and tablets to a standard HDMI cable. There is a long list of powered adaptors that allow you to connect devices with different connector types and electronic signals to each other. Most are under \$50.00. In part because there is a royalty fee on HDMI connectors, for several electrical, mechanical, and economic reasons, Display Port is becoming the preferred video port. In the future, maybe, hopefully, Display Port will be the one and only to deal with.

From the September 2019 issue, Orange Bytes, www.noccc.org,
jsanders@ligasmicro.com.

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

New Old Computing Sayings

The Internet has changed everything, even these tried and true traditional sayings:

- Wherever I lay my @, that's my home.
- The email of the species is deadlier than the mail.
- A journey of a thousand sites begins with a single click.
- Great groups from little icons grow.
- Speak softly and carry a cell phone.
- Don't put all your hypes in one home page.
- Pentium wise, pen and paper foolish.
- The modem is the message.
- The geek shall inherit the earth.
- A chat has nine lives.
- Don't byte off more than you can view.
- Fax is stranger than fiction.
- What boots up must come down.
- Windows will never cease.
- In Gates we trust (and our tender is legal).
- The words of the Prophets are written on the Facebook wall.
- Virtual reality is its own reward.
- Modulation in all things.
- There's no place like home dot com.
- Oh, what a tangled Web site we weave when first we practice.
- Speed thrills.
- A user and his leisure time are soon parted.

How do I use Zoom for online meetings?

Jim & Chris, March 17, 2020

www.geeksonatour.com

Note: Zoom is not one of our normal topics, but we do use it a lot and recognize that many more people are needing to use it now in the era of Coronavirus quarantines. That was our motivation for showing this topic, and also for that reason, we are making the show notes free for anyone. Stay healthy my friends.

www.youtube.com/watch?v=PPJV11PxJZw&feature=youtu.be

Quick Start: Demonstration of using an iPad to host a meeting. It is so quick and easy – anyone can do it. In this demo, Chris already has a Zoom account and knows her instant meeting ID to send to people (instructions for this later). She shows just how easy starting a meeting can be.

- Install the Zoom meetings app from the App store
- Make sure you have an account with Zoom
- Open the app, tap on New meeting, Start meeting
- Send link of meeting ID to the people you want to join you, when they join, they will appear
- Tap the screen to see controls like “Gallery view” to put everyone in their own box.

Other controls include turning audio on/off and also turning video on/off
Note: the poor sound in this demo is due to our feeding Zoom sound into the YouTube stream. The Zoom sound itself is good.

We use Zoom a lot for Toastmasters meetings. You can see a sample meeting where our Online Presenters Toastmasters club teaches how we use Zoom to hold a meeting, including participants from around the world! How to host an online Toastmasters meeting. Note: if you watch the Toastmaster video, within the first 2 minutes you will see why it can be so important for participants to remain muted (microphone off) unless they are speaking. The unintentional noise is very distracting. The meeting host therefore has the power to mute ALL. You will also notice that some participant's video pops up in unwanted places – that is also because their microphone is on. The “active speaker” view automatically gives video focus to whoever is talking – or making any noise.

Many people have experience with video calling apps like Facetime, Skype, Hangouts and Facebook messenger. For all of those, each participant needs an account and one person needs to call the others. When someone gets a call, they can answer. Zoom is built for video meetings – the “host” sets up the meeting and sends a link to the others. The people who are invited do NOT need a Zoom account, all they need is the link. Think of it like the host sets up in a room and all the participants need to do is enter that room.

Get Help

Got questions? The Zoom.us website has all the help you could ever want. Just go to Zoom.us and click the Support link in the upper right. You will see a search box to type in your question, or you can browse popular topics and one minute video introductions. I especially like the

Odds and Ends

<https://davescomputertips.com/>

[Acronis True Image Home](#) – Do you value the data on your computer? Do you value your time? How much time will you spend recovering data and returning your computer to its original state after a hardware failure or software glitch? Acronis True Image is my #1 pick for backup software! True Image consistently creates backups 10-20% smaller than its competitors and doesn't require Microsoft's .Net framework to run like Norton. True Image creates backups to internal drives, external drives, network drives, and directly to CD/DVD. If you value your data you need this program! Read my backup strategy here.

[Aomei Backupper](#) – Easy to use free image-based backup solution. Full system backups, scheduling, cloning. Create bootable media, including disc and USB, for disaster recovery. Highly recommended.

[FBackup](#) – A free, yet very simple and effective file backup program. Back up important files and folders to local, external (USB) or network drives. Back up to ZIP compressed file or exact copy. Includes scheduler, file filters, verification, password protection and more.

[ImgBurn](#) – Highly developed advanced free burning software. Great range of features and options. More suited to advanced users.

Live Training section at the bottom. If you can't attend a live session, just scroll down to see past live session recordings.

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

Editor's Note: To continue reading the following articles, you may copy the long URL at the end of the article and enter it into a web browser or go to www.rcsi.org/newsletr.htm and click on the URL in the web version of the newsletter.

New brain reading technology could help the development of brainwave-controlled devices

The Francis Crick Institute

A new method to accurately record brain activity at scale has been developed by researchers at the Crick (London), Stanford University and UCL (London). The technique could lead to new medical devices to help amputees, people with paralysis or people with neurological conditions such as motor neurone disease.

The research in mice, published in *Science Advances*, developed an accurate and scalable method to record brain activity across large areas, including on the surface and in deeper regions simultaneously.

Using the latest in electronics and engineering techniques, the new device combines silicon chip technology with super-slim microwires, up to 15-times thinner than a human hair. The wires are so thin they can be placed deep in the brain without causing significant damage. Alongside its ability to accurately monitor brain activity, the device could also be used to inject electrical signals into precise areas of the brain.

"This technology provides the basis for lots of exciting future developments beyond neuroscience research. It could lead to tech that can pass a signal from the brain to a machine, for example helping those with amputations to control a prosthetic limb to shake a hand or stand up. It could also be used to create electrical signals in the brain when neurons are damaged and aren't firing themselves, such as in motor neurone disease," says Andreas Schaefer, group leader in the neurophysiology of behaviour laboratory at the Crick and professor of neuroscience at UCL.

You can continue reading about the research on the Eureka website and about the micro-wires developed at Stanford University.

www.eurekaalert.org/pub_releases/2020-03/tfci-nbr032020.php or

www.news.stanford.edu/2020/03/20/bringing-silicon-computing-power-brain .

Researchers use machine learning to discover coronavirus treatments

by Data Science Institute at Columbia

Two graduates of the Data Science Institute (DSI) at Columbia University are using computational design to quickly discover treatments for the coronavirus. Andrew Satz and Brett Averso are [chief executive officer](#) and [chief technology officer](#), respectively, of EVQLV, a startup creating algorithms capable of computationally generating, screening, and optimizing hundreds of millions of therapeutic antibodies. They apply their technology to discover treatments most likely to help those infected by the virus responsible for COVID-19. The machine learning algorithms rapidly screen for therapeutic antibodies with a high probability of success.

Conducting antibody discovery in a laboratory typically takes years; it takes just a week for the algorithms to identify antibodies that can fight against the virus. Expediting the development of a treatment that could help infected people is critical, says Satz, who is a 2018 DSI alumnus and 2015 graduate of Columbia's School of General Studies.

"We are reducing the time it takes to identify promising antibody candidates," he says. "Studies show it takes an average of five years and a half billion dollars to discover and optimize antibodies in a lab. Our algorithms can significantly reduce that time and cost."

Speeding up the first stage of the process—antibody discovery—goes a long way toward expediting the discovery of a treatment for COVID-19. After EVQLV performs computational antibody discovery and optimization, it sends the promising antibody gene sequences to its laboratory partners. Laboratory technicians then engineer and test the antibodies, a process that takes a few months, as opposed to several years. Antibodies found to be successful will move onto animal studies and, finally, human studies.

Continue reading at <https://techxplore.com/news/2020-03-machine-coronavirus-treatments.html>.

US successfully planned for the 'endless frontier' of science research in 1945 - now it's time to plan the next 75 years

By Marc Zimmer, Professor of Chemistry, Connecticut College

The U.S. has been the most productive country for science and technology for decades. Many of the basic policy tenets that supported American prowess date back 75 years, to a document called "[Science: The Endless Frontier](#)." Released by the first [U.S. presidential science adviser](#), engineer Vannevar Bush, just two weeks before the Hiroshima bombing in 1945, it would become the blueprint for postwar science.

"The Endless Frontier" led scientists to successfully advocate for federal scientific funding and a separation between [science policy and politics](#). They argued that if [science could win wars, it could also help maintain peace](#).

The report advocated that governmental, industrial and academic research can accomplish far more in partnership than in isolation. It led to the development of the modern American research university, the National Science Foundation and increased government funding for science research, which rose by more than [a factor of 10 from the 1940s to 1960s](#).

But many facets of the plan aren't working anymore, and the structural framework laid out in "The Endless Frontier" needs refreshing for 2020. Research funding, [especially the government share for basic research, is being reduced](#), there is a narrower focus on [short-term outcomes](#) and U.S. federal agencies are [cutting scientific advisory panels](#). How the country, the research community and the public respond to these changes, will determine the United States' geopolitical standing.

On the occasion of the 75th anniversary of the report, the National Academy of Sciences, The Kavli Foundation and the Alfred P. Sloan Foundation hosted a [symposium to reflect upon the past, present and future](#) of the United States' scientific research enterprise. It brought together leaders from science, government, academia, business and philanthropy.

Check out the result at <https://theconversation.com/us-successfully-planned-for-the-endless-frontier-of-science-research-in-1945-now-its-time-to-plan-the-next-75-years-131742>.

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URMC Begins Clinical Trial for New COVID-19 Treatment

Wednesday, March 25, 2020



The University of Rochester Medical Center (URMC) is participating in a NIH-sponsored clinical trial to evaluate the safety and efficacy of the investigational antiviral drug remdesivir in hospitalized adults diagnosed with COVID-19. The study is being led by [Ann R. Falsey, M.D.](#), and [Angela R. Branche, M.D.](#), with the URMC Vaccine Trials and Evaluation Unit (VTEU).

Remdesivir, developed by Gilead Sciences, is a broad-spectrum antiviral treatment that has been previously tested in humans with the Ebola virus and has shown promise in animal models for treating Middle East respiratory syndrome (MERS) and severe acute respiratory syndrome (SARS), which are caused by other coronaviruses. It is believed that the drug blocks a particular enzyme that is required for viral replication.

The [double-blind, placebo-controlled trial](#) will involve acute COVID-19 inpatients at Strong Memorial Hospital. The study may be expanded over time to include additional investigational antiviral treatments.

The URMC VTEU was established with support from the National Institute of Allergy and Infectious Diseases to conduct clinical trials of vaccines, treatments, and diagnostics for known and emergent infectious threats. URMC is one of only nine VTEU sites in the U.S.

Article from www.urmc.rochester.edu/news/story/5631/urmc-begins-clinical-trial-for-new-covid-19-treatment.aspx.

Immediate Future Club Meetings

Since many places are closed, including our usual meeting place, we will try a few ventures to keep in touch. There has been an explosion in the use of online services such as Zoom and Skype. Zoom might be the best service for us to try first, since it does not require the 'attendees' to install any software. You would be sent a link, by email, to join a meeting. We have used this for several remote presentations. All I had to do was click on a link and join the meeting. At St John's, the mic on my laptop was always on so we could ask questions during the presentation. But, since everyone would be joining from home, the 'presenter' will probably mute everyone's mic, otherwise it would sound like everyone was talking at the same time in a room. A chat window would be displayed so you could ask questions. The presenter could then answer questions from our members.

The same system could also be used for small meetings. Video and mics of participants could be left on, just as if everyone was sitting at the same table. Let's cross our fingers and hope the COVID-19 world pandemic ends soon. This isn't related to our club, but my soccer season for kids is in jeopardy.

Linux SIG is canceled for April, and possibly for May. This would depend on whether the Gates library is allowed to reopen.

Our Meeting Place

St John's Meadows at

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

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



Stephen R Staub

February 2, 1944 - April 8, 2020

Stephen R Staub of Gates, NY passed away on April 8, 2020. Stephen was predeceased by his parents Theresa J & Richard J Staub and his brother, Dennis S. He is survived by his many cousins including Trapist Monk Brother Anthony Weber and special friend, Beth Sulli and family.

Funeral Services at a later date. Interment: Holy Sepulchre Cemetery.

When I joined the club, it was known as the Rochester Computer Society. I wasn't there at the beginning, but Steve apparently was, back to the days of FROG (First Rochester Osbourne Group). He obviously enjoyed being a part of groups and would make reference to the remote control car club and the past with me, including his days as a soccer player (I help run youth soccer programs).

Steve enjoyed the computer club, but had strong roots to the past. I helped him with his old DOS computers and transferred some of his files to a newer, more current computer. It was a challenge to get his 'AB' switches to work the desktops and printers. It really annoyed him when changes in operating systems would render his equipment obsolete. Technology would strong arm Steve and drag him, kicking and screaming, into the future. The club later had an opening for president, and Steve volunteered for one year, which went on for many years. He kept a lot of older club routines going and always fought against the modern changes necessary to help keep the club running in the 21st century, but usually, reluctantly, tried them out. We all enjoy the past, but technology changes and so must we. I'll miss Steve's complaints about having to give up the past. I think we all will.

Tony Dellelo