

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, and we do not sell your data or email address.

Program Meetings No admission fee for nonmembers. 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. A courtesy copy may be emailed to the author or Monitor editor.

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



** We are back and meeting in person again **

web: www.rcsi.org Rochester, NY June 2021 Vol. 39, No. 6

> June 8, 'Computer Symbology' a presentation by Arpad Kovacs

July 13, 'Tech of South America' presented by Tony Dellelo

Annual Picnic, Are we ready to try it?

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APCUG is offering online workshops during the spring

* * Because of COVID-19, * * * * Linux sig is currently being held online. * *

2021 Data Breaches, The Worst So Far

Eugene Bekker in Data Breach & Technology, Personal

m There was a whirlwind of scams and fraud activity in 2020. Data breaches continue to expose consumers' Personally Identifiable Information (PII) at an alarming rate, putting close to three hundred million people at risk of identity theft and fraud. Cybercriminals are also focusing their time on other lucrative cyberattacks, such as



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

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

We have stopped printing the Monitor newsletter and leaving hard copies at some area computer repair shops. Digital copies may be obtained from www.rcsi.org or my Pcloud storage at

https://tinyurl.com/tonydelrcsi (this link works in PDF version only). Also includes presentation slides and articles too large for this newsletter.

Some Past Presentations:

Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
Keeping Mobile Devices Secure
3D Printing, ENABLE project
Internet Security and Privacy
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
Cut the Cord, Streaming Services

<u>ransomware</u>, <u>credential stuffing</u>, <u>malware</u>, and <u>Virtual Private Network</u> (<u>VPN</u>) exploitation.

Data breaches aren't going anywhere and we're here to keep you up to date on the worst data breaches of the year putting you at risk of identity theft.

Editor's note: Here is just a sampling of some data breaches reported on this website.

Ubiquiti Inc.

January 11, 2021: One of the biggest Internet of Things (IoT) technology vendors, <u>Ubiquiti, Inc.</u>, alerted its customers of a data breach caused by unauthorized access to their database through a third-party cloud provider. The email communication advised customers to change passwords and enable multi-factor authentication. The data exposed may include an undisclosed number of customer names, email addresses, hashed and salted passwords, addresses, and phone numbers.

Facebook, Instagram and LinkedIn

January 11, 2021: A Chinese social media management company, <u>Socialarks</u>, suffered a data leak through an unsecured database that exposed account details and Personally Identifiable Information (PII) of at least 214 million social media users from Facebook and Instagram, and LinkedIn. The exposed information for each platform varies but includes user's names, phone numbers, email addresses, profile links, usernames, profile pictures, profile description, follower and engagement logistics, location, Messenger ID, website link, job profile, LinkedIn profile link, connected social media account login names and company name.

MeetMindful

January 24, 2021: The dating platform, <u>MeetMindful.com</u>, was hacked by a well known hacker and had its user's account details and personal information posted for free in a hacker forum. The leaked details of more than 2.28 million users registered included names, email addresses, location details, dating preferences, marital status, birth dates, IP addresses, Bcrypt-hashed account passwords, Facebook user IDs and Facebook authentication tokens.

Bonobos

January 22, 2021: Customer data was stolen from the men's clothing retailer, <u>Bonobos</u>, was found for free in a hacker forum after a cybercriminal downloaded the company's backup cloud data. The exposed database contains order information for over 7 million customers, including addresses, phone numbers, and account information for 1.8 million registered customers, and 3.5 million partial credit card records.

U.S. Cellular

January 28, 2021: Through a targeted <u>attack on retail employees of U.S. Cellular</u>, the fourth-largest wireless carrier in the U.S., hackers were able to scam employees into downloading malicious software onto company computers. Once downloaded, the software granted remote

Special Interest Group

Linux Sig

We are back!
Linux Workshop,
third Saturday of
each month, Noon-4PM

NEW LOCATION: Gates Public Library

902 Elmgrove Rd, 14624, between Buffalo Road and 531 Expressway. The room we use is on the second floor, SE corner, by the restrooms.

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

Because of coronavirus,

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

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

Carl Schmidtmann

Free, Virtual Technology Conferences, ONLINE presented by APCUG

The 2021 schedule **Saturdays:**

May 1, August 21, November 6 from 1 – 4 pm, EST

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

access to the company devices and to the customer relationship management (CRM) software containing account records for 4.9 million customers. The company states that 276 customers were impacted and notified of the security incident. While viewing a customer's account in the CRM, the hacker had access to names, addresses, PINs, cell phone numbers, service plans, and billing/usage statements.

"Compilation of Many Breaches" (COMB)

February 2, 2021: A database containing more than 3.2 billion unique pairs of cleartext emails and passwords belonging to past leaks from Netflix, LinkedIn, Exploit.in, Bitcoin, Yahoo, and more were discovered online. This is the largest compilation of data from multiple breaches, which is where the name "Compilation of Many Breaches" or COMB comes from. The searchable and well-organized database was leaked to a popular hacking forum, giving hackers access to account credentials, including approximately 200 million Gmail addresses and 450 million Yahoo email addresses, and more.

California DMV

February 18, 2021: The <u>California Department of Motor Vehicles</u> (DMV) alerted drivers they suffered a data breach after billing contractor Automatic Funds Transfer Services, was hit by a ransomware attack. The attack exposed drivers' personal information from the last 20 months of California vehicle registration records, including names, addresses, license plate numbers and vehicle identification numbers (VINs).

T-Mobile

February 26, 2021: An undisclosed number of <u>T-Mobile customers</u> were affected by <u>SIM swap attacks</u>, or SIM hijacking, where scammers take control of and switch phone numbers over to a SIM card they own using social engineering. With access to customer phone numbers, scammers receive messages and calls which allows them to log into the victims' bank accounts to steal money, change account passwords, and even locking the victims out of their own accounts that use two-factor authentication. The attack also exposed customer information including names, addresses, email addresses, account numbers, social security numbers (SSNs), account personal identification numbers (PIN), account security questions and answers, date of birth, plan information, and the number of lines subscribed to their accounts.

SITA

March 4, 2021: The global IT company, <u>SITA</u>, which supports 90% of the world's airlines confirmed it fell victim to a cyberattack, exposing the PII (Personally Identifiable Information) belonging to an undisclosed number of airline passengers. The stolen information includes names, travelers' service card numbers, and status level.

California State Controller's Office (SCO)

March 23, 2021: A phishing attack targeting the <u>California State</u> <u>Controller's Office (SCO)</u> Unclaimed Property Division led to an employee clicking on a malicious link, logging into a fake website, and granting a hacker access to their email account. The criminal had access to the account for 24 hours, allowing permission to view Personally

RCSI Officers

Pres: Mark S. Lawson . . 544-5377 mslawson51@peoplepc.com VP:

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Board Members at Large

Standing Committees

Linux SIG: . . . Carl Schmidtmann unixgeek@faultline.com
Programs and Monitor editor: Tony Dellelo
Webmaster: Bob Avery
Membership and Help's Half
Hour: Jan Rothfuss

Planning Meeting

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

NOTE: Because of Covid-19, we meet online.

Newsletter Printing

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

Club Mailing Address

Rochester Computer Society, Inc PO Box 18516 Rochester, NY 14618 Identifying Information (PII) contained in Unclaimed Property Holder Reports and to send more phishing emails to the hacked SCO employee's contacts. The number of employees affected and the types of personal information impacted have not been disclosed.

Cancer Treatment Centers of America

March 26, 2021: The <u>Cancer Treatment Centers of America</u> sent out notifications to 104,808 patients, alerting them a compromised email account led to medical information being accessed by an unknown third-party. The compromised account contained patient names, health insurance information, medical record numbers, CTCA account numbers, and limited medical information.

ParkMobile

April 12, 2021: A third-party software vulnerability is responsible for exposing 21 million customer records belonging to ParkMobile, a contactless payment parking app. The stolen data includes email addresses, phone numbers, license plate numbers, hashed passwords and mailing addresses.

GEICO

April 19, 2021: The auto insurance company Government Employees Insurance Company, known as <u>GEICO</u>, filed a data breach notice announcing information gathered from other sources was used to "obtain unauthorized access to your driver's license number through the online sales system on our website." The total normal of insured drivers affected has not been disclosed, but the hackers had accessed between January 21 and March 1. Driver's licenses contain Personally Identifiable Information (PII) such as name, address and date of birth.

Reverb

April 24, 2021: A database containing the personal details of over 5.6 million users of the popular music instruments online marketplace, Reverb, was discovered after it was leaked into the Dark Web. The database contained full names, email addresses, postal addresses, phone numbers, listing/order count, PayPal account email, IP address, and more.

Editor's Note: I ran across this website and found it rather scary. Hackers are attacking any site that they find a vulnerability. Once a database is entered, it can be downloaded and placed on a 'hacker website' for anyone to take advantage of and use for their own means. Hackers live in every country of the world and are very difficult to apprehend. So, be careful out on the Internet and be wary of the information you hand out. The website that I went to is https://www.identityforce.com/blog/2021-data-breaches.

APCUG, **Tech for Seniors**, via Zoom, is a weekly event on Monday mornings. The session begins at 11:30 a.m. EST for a half-hour of "social time" and at noon, the actual meeting begins and is locked so no one can interrupt the speakers.

The meeting ID is **526-610-331** (there is no password) and you'll be placed in a waiting room and then admitted.

Here is a link to previous episodes: (132) Ronald Brown - YouTube.

Tidbits of probably useless information

The smallest bones in your body are in your ear.

The tongue is the strongest organ of the body.

The fastest muscles in the human body are those that make the eye blink.

It is impossible to sneeze with your eyes open.

You loose about one percent of your body weight when you are thirsty.

Your brain is more active during sleep than when you are awake.

There are seven different types of twins.

Of all the organs in the human body, the tooth is the only one that cannot heal itself.

A human skeleton is completely renewed every 10 years.

Unless food is mixed with saliva, you can't taste it.

Did you know the average person falls asleep in 7 minutes?

Did you know a bear has 42 teeth?

11% of people are left handed.

85% of plant life is found in the ocean.

Lemons contain more sugar than strawberries.

8% of people have an extra rib.

Can Browser Extensions See My Bank Account?

by Leo Notenboom, https://askleo.com/ Making Technology Work For Everyone

Browser extensions are often installed with little thought to the immense security risk they present.

I read an article on How-To Geek and I am somewhat alarmed that my few browser extensions may pose a security risk. I currently use Adblock, HTTPS Everywhere, Chrome Audio Capture, GoFullPage-Full Page Screen Capture, LastPass, and Adobe Acrobat. The article in question is titled "Did You Know Browser Extensions Are Looking at Your Bank Account?" In some ways, the article feels a little sensational. In other ways, it doesn't go far enough. Regardless, this is a very important concept to understand.

Can extensions be trusted?

Extensions add a wide variety of functionality to web browsers. In order for them to be able to do what we want them to, they need access to almost everything, often including the complete contents of the webpages we view. Extensions from trusted and reputable sources limit their activities to what they promise, even though they could do much, much more. Extensions from elsewhere? There's no real way to know.

Browser extensions

Browser extensions, also called add-ons or plugins, provide functionality the browser's features do not include. Examples include ad blockers, password managers, web clippers, security software, and more. Most commonly, they're found in specific add-on repositories like Microsoft's store for Edge, Chrome's store, or Firefox's. Often browser extensions make the rounds by nothing more than word-of-mouth advertising as people use them to resolve issues or add functionality.

Can they see?

For extensions to perform their task, they need access to information within the browser. Sometimes that information is limited — perhaps the <u>URL</u> of the page you're visiting, and nothing more. Other times, that information seems unlimited. While most browsers have a more granular permissions system, many extensions ask for, and get, access to everything. *Everything* in this context means your browser settings, the pages currently displayed in your browser, and the content of every webpage you view.

Some extensions also have the ability to modify what you see before you see it. For example, there are extensions designed to configure your Facebook experience more to your liking: they make a variety of changes to the pages you see, based on the options you choose.

So, can a browser extension see your bank account when you visit your bank's website? Absolutely. <u>Browser extensions can see anything on any site, banking or not</u>. And, yes, that's an important security risk to be aware of.

Do they?

The real question is, do they? Do browser extensions look at your bank account? Even that isn't a simple question to answer. An

Jere's Tech Tips

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

WHERE TO DOWNLOAD SAFE FREE SOFTWARE.

NINITE - Ninite is simple. The website presents you with a list of programs to select, and you check the boxes for all the apps you want. Then, clicking the download button will download a custom installer file that bundles all the selected programs together so you can install them in bulk. Ninite is known for its safety and security. It automatically declines toolbars and extra junk, runs in the background, and doesn't require you to click Next over and over. Thus, there's no risk of malware or bundled garbage. Running the same installer file later will cause Ninite to automatically update everything you downloaded originally.

While there are only a few dozen apps on Ninite, it has a lot of the most popular Windows software like Chrome, VLC, Zoom, LibreOffice, and more.

Here is the short address for the website. https://ninite.com/

13 WAYS TO OPEN THE CONTROL PANEL ON

WINDOWS 10 - While there's talk of Microsoft axing the Control Panel, it isn't going anywhere anytime soon. Some important settings are only found in the classic Control Panel on Windows 10—they aren't in the Settings app. Here are 13 ways you can open the Control Panel.

How-to Geek has the 13 different ways here. https://bit.ly/3d2iCN5

extension that, for example, scans webpages you visit to provide some kind of functionality could very well be scanning your bank account pages as you visit your bank. Do they *know* it's a bank? Do they *care* it's a bank? Not if they're legit. But if scanning pages is required to do the job the extension provides, then yes, they could be looking at it. Whether or not they do something malicious while they're in there brings us to the most important take-away of all.

Only install extensions you trust

Given the access extensions can have to see the content of every webpage you visit, you're placing a tremendous amount of trust in them. A browser extension could, for example, promise to do one thing — or even actually do it — but it could also be slurping up all your data and saving it for some hacker somewhere. It's critical, then, that you trust whoever is providing the extensions you use. Whenever you consider adding yet another extension (and I'll admit, they do seem to accumulate), think long and hard about whether the promised functionality is worth the security risk. Take the time to determine who's providing it and how much of your trust they deserve. When in doubt, live without the extension.

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

Dan's Desk

Backing Up

By Dan Douglas, President Space Coast PC Users Group

We've discussed the subjects of performing backups recently at our meetings, so I thought I would update the article I wrote on the topic back in 2018.

Two types of files are required to be backed up. There are your personal files, normally stored in the following folders under your login account in Windows: Desktop, Documents, Downloads, Favorites, Music, Pictures, and Videos. Each user that has an account on a PC has their own set of these folders. If the user only uses the programs that come with Windows or has a standard set of programs that they add to Windows that can be easily reinstalled either from a DVD/CD backup or a download file, then that makes backup and recovery much easier. The other type of files to be backed up would be the Windows System Files. These include the Windows Operating System itself plus all of the programs/apps, files, and data used by those programs/apps. If you have all of your personal files backed up and you have the files required to reinstall your programs, then you can easily get a replacement PC or hard drive restored completely.

Just about every PC user has heard that they should back up their PC, but based upon what I've seen, only about 20% have an active plan in place. The reasons that I've been told that users do not perform backups regularly are along these lines:

I don't know how to set it up

Scam Alerts

These are actual text messages sent to my cell phone.

585-765-6686 Hi, trying to find more fair Car protection prices in your area? Text back GHG6 to get rates as low as 19 per month.

626-319-5734
Attention! Your data has been compromised. Required restoration ASAP et14f.com/CgfLppp....

833-473-1388
Amazon: Your account is currently locked for security reasons. Please verify your payment information here: https://amzsms-

link.net/r/LIAXRj9?code=T1A... CASE ID: LOOJIGL69

D: LOOMGLGB

518-982-4731 Amazon: Thank you for your purchase. We will notify you when its shipped. View your order and special rewards on rh11t.com/in0NUU2....

913-954-2232 Your Order Was Delivered. Your Order: iPhone 12 Pro-128GB-ed05g.com/Nvo9kjq....

631-690-6904 2 Viruses Detected – Please secure and clean your system right away! <u>Yf12I.com/H1fUrPB...</u>.

214-354-0684 SYSTEM WARNING: We have found vulnerabilities on your mobile phone. Tap here to remove bugs >> <u>fz23v.com/HPWpVG...</u>.

619-673-7035 George, want your girl begging for more. Check out what me and my friends use bl11p.com/CgCrT4....

- It will slow down my computer too much
- It's too costly
- I forget to do it

None of these are acceptable excuses anymore! Let's go through these one by one and see how to address the issues.

Setting up your backup

In Control Panel, under every version of Windows since Vista, there is an app named Backup and Restore or Backup and Restore (Windows 7). This app is suitable for 99% of the user community. This app lets you pick a target location for where your backup will be stored either on a local drive or a network storage location, which can include cloud storage. A schedule can be set for what frequency you want to use for creating your backups – daily and what time of day or weekly by day of the week and time of day or monthly by day of the month and at what time of day. You can also determine if you want just your file libraries backed up or the whole disk(s). In both cases, a System Image will always be created as well. The System Image can be used by a restore program to exactly duplicate your hard drive onto a new PC or a new hard drive. The retention period can also be set for how long to keep a backup for or you can allow Windows to manage the space and to automatically replace the oldest backup with the newest.

Will slow down my computer

Select the best time to perform your backup. When you select the time of day to run the backup as described in the previous section, you must pick a time that will be when your computer will be powered on. The backup program cannot power on a PC that is turned off to perform a backup. So if you use it each Sunday at 7 pm, make sure you leave your PC on every Sunday evening. A backup that runs when you are using the PC can impact your responsiveness and will take longer to complete than running at a time that no one is using the PC.

Cost of running the backup

Since the backup program is included with every copy of Windows, there is no software cost. In addition, almost all external backup drives include a backup program of some sort. Cloning/backup software from Macrium is also recommended. The only cost is that of providing a backup drive, either as a local hard drive or a network-accessible location such as a Network Accessible Storage (NAS) or cloud storage. This drive can be used for other purposes so even that cost can be split across other activities. An external 5TB USB 3.0 drive can be bought for less than \$130 lately, so that's cheap insurance for not losing all of your data.

Set it once and it's automatic

As we saw in the sections above, once you set up the backup program, it will run automatically as long as the backup location is accessible and the computer is turned on at the scheduled time. Perhaps a repeating calendar reminder note will help. Make sure that you are always protected!

Interesting Internet Finds

Steve Costello scostello@sefcug.com

The Two Types Of Cloud Data Threats And How You Protect Yourself

https://askleo.com/two-cloud-data-threats/

Leo Notenboom explains the two types of threats for having your data in the cloud and suggestions for protecting yourself from them. (Note: I have been using the cloud for years without any problems, but I only keep data that is recent and encrypted.)

How To Use Linux Live CD To Back Up Data From Windows PC https://www.maketecheasier.com/rescue-your-pc-with-linux-live-cd/ If you use a Windows PC it is a matter of when not if you will have a problem being unable to access the PC. This article explains how to use a Linux Live CD to perform a rescue of your data.

Change Your Secret Router Password

https://cynmackley.com/2021/01/1 9/change-your-secret-routerpassword/

Something most people overlook for security is changing the router password. Cyn explains how to change this password, though the specifics vary depending upon the specific router.

Does Your IP Address Expose Your Home Address?

https://askbobrankin.com/does yo ur ip address expose your home address.html

I have heard this question asked at many user group meetings. This post from Bob Rankin gives the best answers I have seen so far. Restoring from a backup is best suited to situations where your hard drive is damaged and some files can no longer be accessed or the system won't even boot up. I've seen a lot of computers recently, where the owner complains of poor performance and upon investigation, I've been able to determine that it was a hard drive failing that was causing the lack of responsiveness. The hard drive would sometimes retry reading a file hundreds of times before either being successful or unsuccessful. This causes the hard drive to fall behind in any other requests for data and therefore the whole system slows down.

The File History app, which was introduced in Windows 8, is the best program to use for restoring individual files. Every time a file is created, changed, or deleted a copy can be written to the file history backup drive. This drive can then be used to restore a previous version if required. This is a great recovery tool if you are ever a victim of a ransomware attack where your personal files are encrypted. You can add additional directories to be backed up in addition to the normal set of personal file folders.

The option of Save copies of files specifies how often File History runs automatic backups. The default is hourly, but you can set the frequency to 10, 15, 20, or 30 minutes; 3, 6, or 12 hours; or choose to back up files once a day. Please note that a new version is created only when at least one item has changed in the file. The Keep saved versions option specifies how long to keep the backups. By default, these are kept forever, but you can also select 1, 3, 6, or 9 months, or 1 or 2 years. If your backup drives are tight on space, you can select the "Until space is needed" option and risk losing older backups quickly.

The best approach is to use the Backup and Restore program regularly, perhaps just using the System Image backup function, together with File History to fully protect all of your important files and folders. That way you will be protected against both hardware failures of the hard drive as well as accidental deletion or corruption of important documents.

Don't pass up the free cloud storage from Microsoft, Google, and others that can supplement what you back up to a local/network drive. Cloud storage is impractical for full drive/image backups due to the extremely long time that it would take to do a full recovery over the Internet, but for individual files, it's great.

Reprinted from The Space Coast Journal, <u>www.spcug.com</u>, datadan@msn.com.

Alerts, Notifications, and Alarms - Oh, My!

By Dorothy Fitch, Editor GVR Computer Club, AZ

I have started using alerts, notifications, and alarms to get my attention. Some of these come to my phone and some by email. Most of the time, I can choose what works best for me for each purpose. Of course, there are notifications that you get even if you didn't specifically ask for them, such as doctor appointment reminders, books that are

Around the World

Covid-19

The worldwide endeavor to create a safe and effective COVID-19 vaccine is bearing fruit. More than a dozen vaccines now have been authorized around the globe; 60 more remain in advanced stages of development.

There are several main countries (China, India, United Kingdom, USA) that have partnered with many other countries, to help develop safe vaccines for use everywhere on the planet.

The logistics of getting the vaccines to all countries have been very challenging. Some vaccines (genetically engineered mRNA based) need to be kept at temperatures that are colder than Antarctica. Vector vaccines and protein subunit vaccines do not require such cold temperatures. Sputnik V uses regular refrigeration.

The vaccine rollout for the main countries that spearheaded the research are currently vaccinating their populations. The rest of the world lags way behind at less than five percent of the population. The methods to deliver vaccines to the poorer countries have been worked out, but not enough vaccines have been manufactured yet.

The final issue is cost. This is a world pandemic and it will be interesting to see which nations and vaccine manufactures step up to the plate and put the saving of humanity in the forefront verses their own profit gain. Will some countries use the vaccine to promote their political policies? We will just have to wait and see.

ready to pick up at the library, and many others. Here are some of my finds and handy tools.

Alerts:

My bank's website allows me to set up alerts for activity related to the bank and credit card accounts. For example, whenever my credit card is charged, either in a store or online, I immediately get an email. If that card is ever stolen or hacked, I will know right away. I can also set up alerts for payments due, deposits, balances, etc.

We have a smart indoor thermometer that alerts us to temperature changes outside a specific range that we set up. That way we can tell from wherever we are reading email if the house gets too hot or cold.

Notifications:

You can <u>sign up at the AZDOT website</u> to be notified of construction activity, accidents, or delays on I-19. After you submit your email address, you can choose which areas of the state, including I-19, you wish to include. These notifications were particularly handy when the Irvington construction area was still active. They also have a <u>phone app</u> that can notify you of highway events.

The US Postal Service offers a free <u>Informed Delivery</u> service to let you know what mail is coming to your mailbox. As mail is scanned in the postal processing center, an image is sent to your email address. (Lately, my email keeps showing me a picture of a postcard from the USPS that says that mail may be delayed. Ironically, that postcard still has not yet arrived!)

UPS's My Choice system tracks your packages and notifies you of their delivery. It's fun to check the map that shows the exact location of the delivery truck when it is in your neighborhood! FedEx has a similar Delivery Manager system and offers to deliver the package to a secure location where you can pick it up if you don't want it left outside your door.

On Election Day, I learned of the phone app from The Guardian that sends alerts to the "lock screen" of my phone when breaking news occurs. The Guardian is a British newspaper with a great reputation and worldwide coverage. So during the evening on 11/3, as election results started coming in, I would hear the distinctive tone I set up for my phone. That sound would prompt me to go look at the television to see the latest results. It was very handy. I am still enjoying the breaking news. I'm using the free version of the app, though a premium version is also available.

I have also subscribed to the free New York Times Morning Briefing and "breaking news" emails. (I usually get the Guardian notifications about 5 minutes before the NYT ones!) Their Morning Briefing has a summary of news headlines and a mini crossword puzzle. To read the entire article or enjoy the full crossword puzzles, you need to pay for a subscription. Lately, the headlines have been enough for me!

The weather station on our roof sends us an email every day with the day's high and low temperatures, wind speeds, and other data (the rain measure has never worked well, so its rainfall reports are rather suspect). It even has its own website, which I can access from my phone.

* * Jokes Stolen from Everywhere * *

What do you get when 9 ants move in with his buddy? Tenants.

Why couldn't the lifeguard save the hippy? He was too far out, man.

A termite walks into a bar and asks, "Is the bar tender here?"

Does the name Pavlov ring a bell?

Just got attacked by 6 dwarves. Not Happy.

You know, there's a fine line between fishing and standing on the shore like an idiot.

A father was washing his car with his son and the son asked, "Dad, can't you just use a sponge?"

One day, a police officer pulls a car over and sees the backseat is full of penguins. The officer tells the driver, "You can't be doing this, you need to take these penguins to the zoo!" The next day, the police officer pulls the same car over again, and says, "Hey! I told you to take these penguins to the zoo!" The driver says, "I did, and today I'm taking them to the movies!"

Why do space rocks taste better than Earth rocks? They're a little meteor.

I have a lot of jokes about unemployment, but none of them work.

Knock knock. Who's there?Owls. Owls who?Yes. Yes they do.

If we ever get to travel again, we'll be able to see what the weather is like at home!

Alarms:

Alarms aren't just for waking you up. They can be great reminders to take your medicine, walk the dog, or whatever suits you. I use the Alarm feature of the Clock app on my Android phone and expect that an iPhone offers the same functionality.

Another phone alarm goes off at 6:59 pm Mon–Fri. We're usually preparing dinner at that time, and we like to listen to "Exploring Music" with Bill McLaughlin on the radio (KUAT, 90.5 FM). This reminds me to set the tuner to the radio so we can listen.

Once a month, my husband needs to submit data for his <u>Rainlog</u> project, where citizen scientists report the amount of rain received in their rain gauge. So, that alarm goes off on the first day of each month at noon as a reminder for him to do that. We have it on our shared Google calendar as a recurring task, but do we ever look there anymore? That calendar is rather empty these days.

It's nice that you can set up and customize multiple alarms to recur on specific days and times.

There are so many possibilities out there that you can subscribe to or set up. Give it a try! If you have a favorite attention-getter you would like to share, reply to this newsletter and let me know.

Reprinted from the January 2021 issue, Green Bytes, https://www.ccgvaz.org/, dmfitch@cox.net.

LINUX SIG

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

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

unixgeek@faultline.com.

The current ban on 'in person' meetings at St. John's Meadows is being lifted. The final details are now being worked out. Check your email for your invite to attend these monthly general meetings.

Odds and Ends

AMD's new supercomputer is faster than Nvidia and Intel's best... combined

AMD (Silicon Valley) has partnered with Cray Inc. (Seattle) to create the world's fastest supercomputer. The machine (called Frontier) will be delivered to the Oak Ridge National Laboratory (ORNL) in 2021 for roll-out at the Department of Energy's discretion. The general uses for this supercomputer will include simulating weather, modeling subatomic structures, and prying deeper into humanity's understanding of physics.



Cray will be taking care of the server infrastructure and providing its Shasta and Slingshot supercomputer technologies. That's quite a task in itself, as the machine will necessitate 90 miles of wiring within its 7,300 sq. ft footprint.

AMD will be fitting Frontier with custom AMD EPYC CPUs built upon "future Zen Core highperformance architecture". Certainly Zen 2. Each CPU will be packaged into a single node alongside four custom Radeon Instinct GPUs, each fitted with high-bandwidth memory. AMD is touting massive AI power with the machine, a key focus of many modern-day supercomputers.

It is hoped that this will help keep the US in the forefront of technological innovation. This will be the second Exascale computer for the US,

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

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

Ingenuity Mars Helicopter Aces Fourth Flight,

By Rvan Whitwam on May 3, 2021

NASA reported last week that its Ingenuity Mars helicopter failed to lift off for its fourth flight, but it succeeded early on Friday. Now, NASA has confirmed that it will be adding a new component to Ingenuity's Mars mission — it's no longer just a technology demonstration, and it'll get extra flight time on the red planet as an "operations demonstration."

Ingenuity rode to Mars attached to the belly of the Perseverance rover, which is the primary robotic explorer for this mission. Ingenuity was added as a technology demonstration as mentioned above, and the team doesn't expect it to survive its first winter on Mars. That's why we've been hearing so much about the historic Mars helicopter — the team wants to fit in as many flights as possible before the drone stops working.

The fourth flight went exactly to plan: Ingenuity remained airborne for 117 seconds and covered 266 meters. NASA now says Ingenuity is working so well that it's transitioning it to an "operations demonstration" mission, and Perseverance will adjust the start of its mission to continue supporting the helicopter, which has rapidly become the star of the show. It was initially slated for a month of flight operations before Perseverance moved on, but now it could continue flying through late summer.

Ingenuity was designed with off-the-shelf hardware such as a Snapdragon 801 smartphone processor, so it doesn't have bulky communication equipment to reach Earth. Instead, it relays data to Perseverance over the Zigbee wireless communication standard. So, Perseverance has to stay close, which means it has not been able to start its primary science operations.

Continue reading at <u>www.extremetech.com/extreme/322444-ingenuity-mars-helicopter-aces-fourth-flight-gets-mission-extension</u>.

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Team develops stable, efficient, anode-free sodium battery by Brandie Jefferson, <u>Washington University in St. Louis</u>, May 3, 2021

When it comes to batteries, lithium-ion are the best we have as far as energy density and convenience. For now.

The Washington University in St. Louis lab of Peng Bai, assistant professor in the Department of Energy, Environmental & Chemical Engineering in the McKelvey School of Engineering, has developed a stable sodium ion <u>battery</u> that is highly efficient, will be less expensive to make and is significantly smaller than a traditional <u>lithium</u> ion battery due to the elimination of a once-necessary feature.

"We've found that the minimal is maximum," Bai said. "No anode is the best anode."

The research was published May 3, 2021, in the journal Advanced Science.

A traditional lithium ion battery consists of a cathode and anode, both of which store lithium ions; a separator to keep the electrodes separated on either side; and an electrolyte—the liquid through which the ions move. When lithium flows from the anode to the cathode, <u>free electrons</u> leave through the current collector to the device being powered while the lithium passes the separator to the cathode. To charge, the process is reversed, and the lithium passes from the cathode, through the separator, to the anode.

The concept of replacing lithium with sodium and doing away with the anode isn't new. "We used old chemistry," Bai said. "But the problem has been, with this well-known chemistry, no one ever showed this anode-free battery can have a reasonable lifetime. They always fail very quickly or have a very low capacity or require special processing of the current collector."

You may continue this article at https://techxplore.com/news/2021-05-team-stable-efficient-anode-free-sodium.html.

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

RIT's VEX Robotics U team takes top placement in national competitions

April 29, 2021

by Michelle Cometa Follow @MichelleCometa

Team wins in the 2021 season propels group to higher tier among collegiate robotics crews

The RIT VEX U Robotics team placed third overall in its late March competition at the Purdue SIGBots Remote Skills Qualifier. It was the fourth event of the season and the team moved up to 12th among the 300 teams in the league that includes robots from the U.S., Canada, China, Puerto Rico, Morocco, Spain, and Mexico.

RIT has been part of the VEX U Robotics Education and Competition Foundation <u>program since 2017</u>. The collegiate series provides students with opportunities to put classroom instruction in robotics, science and engineering into practice, and to encourage students to pursue careers in STEM fields. RIT VEX U is based in the <u>College of Engineering Technology</u>.

Teams build model electric vehicles programmed to drive autonomously over several fields and within different categories of challenges. This year's game, VEX Robotics Competition Change Up is played on a 12-feet-by 12-feet square field with two alliances competing in matches consisting of a fifteen-second autonomous period, followed by a one minute and 45-second driver-controlled period. The object of the game is to attain a higher score than the opposing alliance by placing balls in goals, and connecting rows.

Since February, the <u>RIT VEX U team</u> has competed in competitions via Zoom held by Vaughn College of Aerospace and Technology, Purdue University as well as hosted its own virtual event during the spring semester.

Continue on the RIT website https://www.rit.edu/news/rits-vex-robotics-u-team-takes-top-placement-national-competitions.

RCSI

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

Our Usual Meeting Place St John's Meadows at

Johnsarbor Drive, is on the left, past Clinton Avenue, when going West on Elmwood Avenue. The opening in the white fence is Johnsarbor Drive. At the "T", turn right. The meeting is in the first building on the left –

Briarwood.

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