

Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and new technology. Established in 1981, 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 July and
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

The club would like to have you as a member, and your subscription will help to keep us going. 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 Rochester Computer Society, Inc. a computer/tech club open to everyone



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February 14, 2023, 'Best of CES' (Consumer Electronics), 'The Latest Electric Vehicles'

March 14, '(The) Browser - Your Most Important App' by Hewie Poplock, via Zoom

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TECH-NO-PHOBIA - are YOU a VICTIM YET?

By Jim Cerny, Education Chair & Forums Coordinator Sarasota Technology Users Group

How did all this happen so quickly? Some days I feel like I am left in the dust behind the high-speed train technology. Yes, I am glad technology is progressing. We all benefit from the advances in health care, safety, entertainment, and portability. But there is a downside too. What do you find overwhelming about technology? Let's compare some everyday things from the past to today's latest Internet-connected megaoptioned computer-controlled devices.



"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, www.jazz901.org Sound Bytes is the longest running computer call-in show in the known universe.

We have stopped printing the Monitor newsletter. Digital copies can be emailed or obtained from www.rcsi.org or my Pcloud storage at https://tinyurl.com/tonydel-rcsi (this link works in PDF version only). Also includes presentation slides, past newsletters dating back to 1996 and articles too large for this newsletter.

Some Past Presentations:

The New Space Race, 2021
Tech of South America
Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
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
3D Printing, ENABLE project
Internet Security and Privacy
Features, Mac OS X & Windows

There were no real "couch potatoes" watching TV in the old days; we got our exercise by having to get up OFF the couch to change the channel or adjust the volume. Today in my living room, I have four device controllers for the TV (the TV itself, the Internet TV box, an old DVD player, Apple TV, and a few more I can't identify) — and all of them have dozens of buttons to push. My daily challenge is to figure out which one I should use before I even try to guess which button. Unfortunately, I usually guess wrong the first two times.

The big thing for young kids in the past was being able to read the comics in the Sunday newspaper. Remember Sunday comics in color? My parents would encourage me to read them, and I would pretend I could -but my mom and dad were so proud I was learning to read at the age of 7 or 8. Today parents shove an iPad or iPhone into their kid's hands to amuse them at one-and-a-half. By age two, the child knows more about the phone than their parents. And by age four, they are answering tech hotline questions.

Learning to drive when I was a teenager was a real adventure. I learned the gas, brake, clutch pedals, gear shift, and the two-gauge dashboard (speedometer and fuel). Radio was a luxury. Today cars have several computers to monitor all the "systems" on the vehicle and, hopefully, keep you safe. And don't forget the ever-bigger TV screen on the dashboard -- it gives you access to thousands of options and a nice view when you back up your car. In a few years, there will be no need for car windows (see predictions later in this article).

Going grocery shopping was fun years ago; there were different stores for different things. You would walk to the downtown or shopping street (before malls) and get meat at the butcher's, bread at the bakery, can goods and cereals at the market, and you had to hope fruits and veggies were available in season somewhere. Today it is all online, even fresh fruit and veggies. The downside is that you get what they deliver. Somehow, I find no enjoyment in ordering food online, where I see only a picture of what I may get.

So, what do you think the future will hold for our children or grandchildren with technology? Will you allow me to make some predictions?

- All windows will be replaced with high-resolution TV screens (sort of like Disney's Star Wars hotel). So, you will see what you want or want someone else to see.
- Food will be ordered based on your eating history and automatically delivered to you when you need it – even placed into your kitchen pantry or fridge by personalized food delivery services.
- There will be no need for germ-spreading handshakes, touching, or personal contact.
- All entertainment will be provided for you, including images for your sight, ears, nose, and nerve sensations by technology directly to your brain.

And shortly after all this, computers and robots will take over the world, and we will no longer be needed. So, I recommend we enjoy the technology we have while we can.

Reprinted from https://thestug.org/, jimcerny123@gmail.com.

APCUG, An International Association of Technology and Computer User Groups

https://apcug2.org/

Saturday Safaris Exploring Technology in Depth **Saturdays:**

12 pm - 2 pm EST

https://apcug2.org/saturd ay-safaris/

Tech for Seniors https://www.techforsenior

.com

hosted by Ron Brown and Hewie Poplock Every Monday from 9-10 AM PT, (12-1 PM ET)

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

###

APCUG Website Help Windows & Android Tips: https://apcug2.org/jerestips/_

Apple Tech Tips:

https://apcug2.org/50-best-mactips-tricks-timesavers/

Penguin Platform (Linux):

https://apcug2.org/penguinplatform/

Chromebook Tips And Tricks: https://apcug2.org/chromebooktips-and-tricks/

Guess the most common password. Hint: We just told you

IN BRIEF

NordPass has released its list of the most common passwords of 2022, and frankly we're disappointed in all of you.

Topping the list of the most common passwords was, sadly, "password," followed by "123456" and its more secure relative "123456789," "guest," "qwerty" and lots more you can definitely figure out without needing the help of a cracking tool.

Seriously, few of the passwords in this list are even words: Most are just repetitions of a single character, sequences of easy-to-guess numbers, a straight run down a row of keys, or basic combinations like "pass@123."

Along with a depressingly basic list of common passwords and the speed it takes to crack them (most are listed as < 1 second), NordPass shared some statistics about what's trending in the password world, like the word "Oscars," which pops up especially around award season, as well as "batman," "euphoria" and "encanto" after the eponymous films and TV series that have been popular this year.

This is hardly the first time a list of the most common passwords was led by such easy-to-guess words – nor even the first time this year. Unfortunately, that means there's a problem with people not getting the message on password hygiene.

Alternatively, it's possible many of the basic passwords on this list may be from internet connected devices whose owners didn't change their default passwords. Whether that's the case or not is unknown, but if true it could indicate another problem that really needs to be dealt with.

Getting back to passwords generated by humans, NordPass has some tips for those among us who would rather be opened up to a simple hack than set a tricky-to-guess one. You've probably heard these before, but they clearly need to be stated again.

For starters, make sure it's at least 12 characters long, and combine upper/lowercase letters with numbers and symbols. Better vet, use a password generator.

It's also essential to not reuse passwords on different accounts, something most of us are probably guilty of, as well as regularly auditing accounts to see which you no longer use and can close to reduce your online footprint.

Be sure to also check your password strength regularly, which lots of password managers and web browsers that store credentials are capable of doing. Regularly change passwords, too.

Speaking of which, NordPass, which is in the password management business, says everyone should get a password manager, but of course they would.

Cisco warns over Secure Email Gateway

Cisco has published a bug report that warns that Sophos and McAfee scanning engines on Cisco Secure Email Gateway could allow an unauthenticated, remote attacker to bypass specific filtering features. "The issue is due to improper identification of potentially malicious emails or attachments. An attacker could exploit this issue by sending a

RCSI Board Members

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Planning Meeting

tonydel@techie.com, 9/24

Held on 1st Tuesday of each month at 7 pm, * * ONLINE * *. We will be using <u>Jitsi Meet</u>. ANY CLUB MEMBER MAY ATTEND.

Got Questions?:

Windows: Arpad Kovacs

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Linux & some Mac:

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Monitor Newsletter

The <u>Monitor</u> 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. Limited copies (probably in black and white) will be printed and available at our meetings.

Club Mailing Address

Rochester Computer Society, Inc PO Box 18516 Rochester, NY 14618 malicious email with malformed Content-Type headers (MIME Type) through an affected device," the alert says. "An exploit could allow the attacker to bypass default anti-malware filtering features based on the affected scanning engines and successfully deliver malicious messages to the end clients."

A command-and-control framework intended for use by red teams, known as Nighthawk, is becoming more popular, and will likely end up in the hands of threat actors before we know it, Proofpoint researchers are warning.

Meta links US military to fake social media influence campaigns

Nighthawk was first detected by Proofpoint in September of this year, and is described by the security company as "a mature and advanced" framework "that is specifically built for detection evasion, and it does this well."

Nighthawk hasn't been spotted in the wild being used by bad actors, Proofpoint said, but notes that it would be "incorrect and dangerous to assume that this tool will never be appropriated."

Proofpoint said it observed a 161 percent increase in threat actors using Cobalt Strike, a similar C2 framework, between 2019 and 2020, along with additional quick adoption of Silver, an open-source adversary simulation tool.

Like Cobalt Strike, the company that sells Nighthawk vets its customers to ensure the software doesn't end up in the hands of bad actors. As Google noted in a blog post this week, vetting hasn't stopped threat actors from getting their hands on Cobalt Strike, which is why the search giant said in the same post that it recently made back end changes to ensure Cobalt Strike is "harder for bad guys to abuse."

Source: https://www.theregister.com/2022/11/25/infosec roundup/? utm source=weekly&utm medium=newsletter&utm content=article

Reprinted from the Cape Computer and Technology Club, Cape Town, South Africa, https://sites.google.com/site/capecomputerclub/home.

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

Want Safer Internet? Just Add Onions

By Bob Rankin a Translator for the Technology Impaired

I don't spend much time in dark corners of the Web, but every once in a while I fire up the privacy-focused Tor browser. I just installed the latest version and spent some time exploring the Tor network. It was an interesting and surprisingly non-geeky sojourn! Here's what you need to know about the Tor browser, and how it can improve your online safety and privacy...

Tor Browser Offers Enhanced Privacy and Safety

For the uninitiated: Tor (short for The Onion Router) is a decentralized, global network of anonymous proxy servers. Each node in Tor acts much like a VPN (virtual private network) server. It accepts

Tidbits of probably useless information

The average person falls asleep in 7 minutes.

Lemons contain more sugar than strawberries. The reason that the lemon tastes sour, even having more sugar than the strawberry, is that the lemon contains a high amount of citric acid, usually 3% to 6%, that dominated the sweet taste of the lemon and results in the sour taste.

About one in 500 people have an extra rib. A cervical rib is a supernumerary (or extra) rib which arises from the seventh cervical vertebra. It is a congenital abnormality located above the normal first rib.

Hummingbirds are tiny birds. In fact, they are the smallest birds in all the 10,000 known bird species in the world. Most adult hummers only reach around 3.3 inches in length and weigh around 0.07 to 0.7 ounces. Generally, a hummingbird's heart will beat as fast as 1,260 beats per minute when it's in full flight.

On August 1, 1981, MTV was born, starting its very first ever broadcast with the appropriate 1979 hit "Video Killed the Radio Star."

Room temperature is defined as between 20 to 25C (68 to 77F).

While most animals, including humans, have round pupils, the pupils of sheep, goats, octopuses and toads are of rectangular shape. Rectangular pupils tend to get very narrow during day time, which gives animals a greater accuracy of depth perception in their peripheral vision and better to avoid predators.

your browser's requests for Web content, connects to the server(s) on which the objects reside, downloads copies and transmits them to your browser. The Tor node acts as your proxy; hence the term "proxy server." The benefit of Tor is that the remote server does not get any data about you, since you never connect to the remote server; a Tor node does that on your behalf.

Tor promises to protect against tracking, surveillance, and censorship while you browse the Web. The Tor Browser blocks cookies and deletes your browser history when you close it. For each web page you visit, your request is sent through three Tor relays scattered around the world. At each relay, your traffic is re-encrypted and assigned a new IP address. The website you visit can't tell where you are connecting from. And your Internet Service Provider can't see what sites you visit.

So what about the onions? The onion metaphor is used because on each hop along the Tor network, your request is wrapped in another layer of encryption, calling to mind the layers of an onion. The onion routing protocol was invented in 1995, at the U.S. Naval Research Lab. Mathematicians David Goldschlag, Mike Reed, and Paul Syverson were looking for a way to create Internet connections that don't reveal who is talking to whom. Their work was picked up in the early 2000s by MIT, received funding from the Electronic Frontier Foundation, and in 2006, the nonprofit Tor Project was founded to maintain Tor's development.



As you can imagine, a software tool conceived by math nerds and MIT grads was a bit geeky and difficult for the less-technically savvy people to use, so the Tor Browser was created to put a user-friendly interface on it. The Tor browser is based upon Firefox, and the Tor Project

team is a coalition of part-time developers. You can <u>download the Torbrowser here</u>.

It is theoretically possible to backtrack a Tor network request to see where it actually originated. However, it would take a determined attacker with lots of time and computing resources to do so. To frustrate such espionage, the Tor developers are constantly improving the product to make it more secure. Tor, they say, is the strongest tool for privacy and freedom online. But on the Tor Frequently Asked Questions (FAQ) page, the first question is "Am I totally anonymous if I use Tor?" And the answer is: "Generally it is impossible to have perfect anonymity, even with Tor." That is followed by a list of things you should do (or NOT do) to improve your anonymity while using Tor. I strongly recommend you read through that list before merrily wandering off into Tor land.

Why Use Tor?

There are many good reasons to use Tor, but some of them are bad. Tor provides cover for activists, journalists, authors, and others whom a repressive government might want to track down or merely associate with certain "forbidden" content on the Web. On the other hand, Tor also covers the tracks of illegal arms and drug dealers, child traffickers, copyright violators, mobsters, miscreants, and malefactors.

But that's not us, right? We are going about lawful business using a network that runs through parts of the world where privacy is banned, or where additional layers of privacy are desired.

Windows & Android Tips
Judy Taylour

HOW TO FACTORY RESET WINDOWS 11 REMOVING

EVERYTHING – If you plan to get rid of your computer or have to fix problems, the "Reset this PC" feature with the remove everything option can help, and here's how. How to factory reset Windows 11 removing everything – Pureinfotech.

HOW TO DISABLE STARTUP APPS ON WINDOWS 11 - Here

are four ways to prevent apps from running automatically on startup on Windows 11. How to disable startup apps on Windows 11 – Pureinfotech.

HOW TO VERIFY THAT A LINK IS SAFE BEFORE YOU

click on IT – As you probably know, the Internet is home to a lot of scammy and fraudulent websites. While there is no 100% fool-proof method for detecting every single dangerous website you might encounter, there's a very easy way to find out with a high degree of certainty whether a given page is safe to visit. Here's a little reminder for you. How to verify that a link is safe before you click on it (ricksdailytips.com).

HOW TO DISABLE STARTUP APPS ON WINDOWS 11 - Here

are four ways to prevent apps from running automatically on startup on Windows 11. <u>How to disable startup apps on Windows 11 – Pureinfotech.</u>

LAPTOP FROM MURDERING
YOUR BACK – Use these tips to
skip the neck and back pain. <u>8</u>
Ways to Stop Your Laptop From
Murdering Your Back
(howtogeek.com).

I found installation of the Tor Browser to be quite straightforward. If you've ever downloaded software via the Web, you'll find it familiar. In less than 5 clicks, I was up and running with Tor. On the downside, websites I visited loaded noticeably slower than usual, especially those with many images. One other glitch was that some pages loaded in languages other than English, because the proxy that was used to connect me was located outside the USA.

Pirates, Rabbit Holes, and Latency

Thinking of "sketchy sites to check out with Tor" led me first to The Pirate Bay. (In case you're not familiar, TPB is described by Wikipedia as "an online index of digital entertainment media and software." That's a polite way of saying that it's a search engine for pirated movies and music.) I got an "unable to connect" error. Solution: I tried again later, and it worked. If you have trouble connecting to a website, or need help with Tor, see the <u>Tor Project's FAQ page</u>.

Elsewhere on the Internet, Tor mostly behaves well, but slowly. Fast.com reported Tor's download speed as between 5 and 16 Mbps with a 300 ms latency. The same test a moment later but using Chrome without Tor yielded 560 Mbps with 9 ms latency. In my testing, some sites that work just fine in Chrome, Edge or Firefox failed to load, or loaded partially with the Tor browser. In most cases, reloading solved the problem.

Pages will load significantly more slowly via Tor than they do over the regular Internet. I did get a bit impatient waiting for the last bits of a page to load, perhaps as long as 45 seconds after the first bit arrived. But YouTube audio and video files play just fine on Tor; there is no choppiness, at least with 480p resolution. Download speed is not the problem; that 300 ms latency is. Once a video file starts streaming it does so continuously at an adequate speed. But a web page that fetches content from 15 different sources takes $0.3 \times 15 = 5$ seconds longer to load due to the 300 ms latency of each fetching. The delay might be reduced if Tor downloaded pages via multiple parallel connections, but that does not seem to be the case in my experience.

Extra Onions, Hold the Liver

Along those lines, there are multiple levels of security available. With the default "Standard" level, all Tor browser features are enabled. The "Safer" level disables "certain features that are often dangerous", such as Javascript on non-HTTPS sites, certain fonts, and math symbols. Audio and video that would normally autostart will be forced into click-to-play mode. The "Safest" mode is recommended only for static sites and basic Web services; Javascript is completely disabled. When I tried to test my speed on Fast.com in Safest mode, it failed and said I was not connected to the Internet.

It's also worth noting that the Tor developers recommend against installing Firefox add-ons with Tor Browser, because some add-ons can bypass proxy settings and break anonymity. And of course, *Tor cannot protect your privacy on a website that requires a sign-in. By signing in, you have identified yourself to that website*. And as I mentioned above, there are some other important do's and dont's on the <u>Tor Frequently Asked Questions (FAQ) page</u>.

Scams

Online scammers have an old bag of tricks, but they are also trying to come up with innovative methods to cheat people out of their money and personal information. Even if you are wellinformed about online privacy, you should review the following list of insidious schemes you should keep a lookout for.

Employment-related scams

Even with unemployment low, you might find it difficult to find a job that is the right fit for your skills, experience and other factors, such as location. It is easy to feel like you're fighting an uphill battle. That is why it is especially frustrating when you come across a job that seems like the perfect fit, only to find out it is a scam.

Employment scams can be sneaky and take different forms. From fake job listings to fraudulent hiring practices, it is important to pay attention to any red flags that might indicate you're dealing with a scammer, including:

- The employer asks for money: A legitimate employer should not ask you to pay anything to start working. If an employer asks you to pay a fee or to cover the cost of training, it is likely a scam.
- The employer is difficult to contact or verify: If you are unable to contact the employer easily or verify their identity, it may be a scam.
- The employer is vague or evasive: If the employer is unwilling to provide details about the job or the company, it could be a sign of a scam.

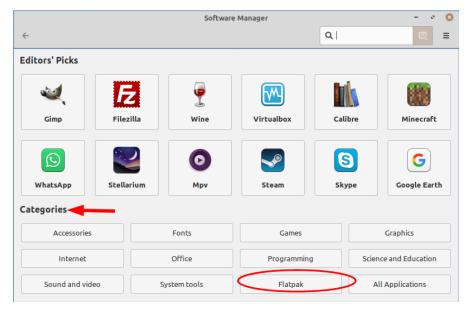
So for browsing the mainstream Internet, the Firefox-based Tor browser is easy to use and provides considerable anonymity, meaning it would be extraordinarily expensive to figure out who is behind Tor's proxies. I don't live in or visit China, Russia, or North Korea, have no plans to join a covert organization, and a life of crime does not appeal to me. But if anything should change it's great to know that Tor is available to cover my tracks, and that it works so well.

Have you tried Tor? Your thoughts on this topic are welcome. Post your comment or question on my website, https://askbobrankin.com.

Flatpaks with Linux Mint

By Cal Esneault, Past President leader of many Open-Source Workshops & SIGs

Linux software is installed using pre-compiled "packages." The traditional method, called dynamic packaging, separately installs the main application and additional supporting sub-components ("dependencies). Mint uses the Debian package management system and provides a graphical Software Manager program to help users install new software. To minimize developer efforts, new software versions usually only appear at two-year intervals (note: security and bug fixes appear as soon as they are available).



Recently, Mint has included the ability to get more recent software using the Flatpak container method. A "container" packages the main program and dependencies as a single unit. Flatpak applications are universally available from *flathub.org* and are maintained by software developers. The Linux Mint software manager has a special section for Flatpak programs (see below). Installation is analogous to the standard method. About 200 Flatpak applications are available at this time.

When installed in this manner, the application will be "integrated" into the menu system (it appears just like any other app). It can also be removed using the software manager.

Virtual Tours

Christ The Redeemer, Brazil

The cultural icon of Rio de Janeiro, Brazil and a symbol of Christianity across the world. The Christ The Redeemer statue is the largest art deco statue in the world. It stands 38 meters tall (around 13 storeys high) and stretches 28 meters wide.

It was built by the Roman Catholic community of Brazil following the end of World War I. The community was concerned about the growing 'godlessness' when Brazil officially became a republic and the church was officially separated from the state.

You can skip the 200+ step climb to the top on this stunning virtual tour of **Cristo Redentor**.

Underwater Cave Diving -

Even certified scuba divers like us are not allowed to explore underwater caves without the right technical qualifications and training. So whether you're a scuba diver or not, you'll most definitely enjoy this cave scuba diving virtual tour.

Giza, Egypt

Explore the Tomb of Queen Meresankh III in this astonishingly good free virtual tour. The image quality is incredible, there's stacks of things to click on and you can wander about as you please. Unmissable! https://my.matterport.com/show/?m=d42fuVA21To.

NASA's Goddard Space Flight Center Virtual Tour - NASA's Goddard Space Flight Center in Greenbelt, Maryland, is home to the nation's largest organization of scientists, engineers and technologists who build spacecraft, instruments and new technology to study space.

While it may be rare that you urgently need a brand new version of standard programs (such as LibreOffice, GIMP, Inkscape, etc.), Flatpaks are very useful in obtaining apps typically unavailable through legacy packaging. A short list of some of these programs is given below.

Discord	Text chat for gamers; phone calls; replaces Skype
Gradio	Browse, search, play radio stations
Bitwarden	Password manager,sync among various devices
Visual Studio	Microsoft proprietary code packaged in a flatpak
Viber	Message or call via PC or mobile
Brackets	Code editor for HTML, CSS, and JavaScript
Shortcut	Video editor for Mac, Windows, Linux
Signal	Voice/Video private calls (PC and Phone)
Slack	Linux version; chat with team members
ElectronMail	Desktop client for ProtonMail
VueScan	Scanner software for Linux, Mac, Windows

Although Flatpak packages come from outside sources and are not compiled by normal reputable groups (Debian, Ubuntu, Mint, etc.), security is enhanced by isolating them from the main OS and from other programs (known as "sandboxing"). Also, developers are helped by writing their interfaces to comply with Flatpak runtime code versus standard Linux OS methods. Finally, some available programs usually run on Windows or Mac OS.

Flatpak apps are a way to augment your standard Linux Mint packaging system, not replace it. Flatpak and other container systems (Snap, AppImage) are established but still developing protocols to address issues raised by the Linux community. Try one out to see how you like the new way.

From the Cajun Clickers Computer Club, https://www.clickers.org/, cpesne@bellsouth.net.

The APCUG Wednesday Workshops (WW) presentations have received high praise from attendees and presenters. Both have enjoyed the Zoom meeting format instead of the VTC Webinar presentations. With the WWs, cameras are an option for everyone. The presenters like seeing the many people attending the workshop and having more time to answer Chatbox questions since more questions can be answered live without a time limit. WWs have either an in-depth two-hour presentation by a single presenter, a panel of presenters, or two presentations with open mic Q&A following the presentations. Everyone likes the biggest feature where the mics are open for general questions, comments, and sometimes socializing. We have people that attend just about every workshop, even from Australia. We've become a Wednesday family. 9 am PT, 10 am MT, 11 am CT, 12 pm ET

Unusual Product

Another health-related product made its way to CES 2023, but this one isn't for humans. Instead, Invoxia is developing an AI-infused collar that tracks the vitals of your dog. For instance, by tracking and compiling data on their heart rate, it creates what the company calls a 'heart signature' that's similar to an ECG which can help owners catch arrhythmia or other heart anomalies through the resting heart and breath rate.

It also records respiratory rate to find other anomalies and lets you keep track of daily activity level, well-being, sleep, appetite, bark, and daily habits through a companion app in order to better monitor your dog's health. There's even a GPS to track their physical location, which could be a lifesaver if your dog ever turns up missing.

It genuinely looks like a normal dog collar and the weight isn't far from one either. One of them was fitted on a plush dog, which did give a great visual of how well it would fit a real dog and just how innocuous the collar is. Seeing a product concerned with dogs' preventative care rather than reactive care is refreshing and it would be interesting to see how far this device goes in having more healthier dogs.

 $\frac{Reported\ on}{\underline{https://www.techradar.com/featur}}\\ \underline{es/the-weirdest-and-most-}\\ \underline{wonderful-products-ces-2023-had-}\\ \underline{to-offer}.$

* * * * * 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 PDF or web versions of this newsletter.

Skynet Smiles: AMD Unveils Monster Instinct MI300 Hybrid AI Accelerator

By Josh Norem on January 6, 2023

At AMD's CES keynote this week, Chairman and CEO Dr. Lisa Su seemingly saved the best for last. At the very end, she held up an absolute monster of an APU, describing it as the first data center chip that combines a CPU, GPU, and memory on a single package. It's called the AMD Instinct MI300, and it packs a whopping 146 billion transistors—46 billion more than found in Intel's sophisticated data center chip, Ponte Vechio. AMD says the MI300 will be coming in the latter half of 2023, so for now it just wanted to show it off a bit.

The chip is absolutely massive; when she held it aloft, it was the size of her palm. The MI300 sports 24 Zen 4 cores along with its CDNA 3 GPU architecture and 128GB of high-bandwidth memory (HBM3). AMD didn't mention how many CUs were being used on the GPU side. The CPU and GPU chiplets are 3D-stacked on top of a base die that connects them to the eight stacks of HBM. The design uses nine 5nm chiplets 3D-stacked onto four 6nm chiplets. It's unclear how the CPU and GPU chips are divided amongst the chiplets and AMD hasn't revealed it yet. The four 6nm base dies are active interposers that handle communications and I/O between the chiplets and the memory stacks.

It's currently slated to power the <u>2-exaflop El Capitan supercomputer at Lawrence National Laboratory</u>. This computer will be powered on by the <u>end of 2023</u> and will offer double the performance of the world's current fastest supercomputer, <u>Frontier</u>, which is also AMD-powered. Frontier was the first supercomputer to break the exaflop barrier. Now it sounds like El Capitan could be the first to 2 exaflops.

Reported at https://www.extremetech.com/extreme/342078-skynet-smiles-amd-unveils-monster-instinct-mi300-hybrid-ai-accelerator.

The Days of the Hydrogen Car are Already Over

byTom Stacey, December 14, 2022

Tom Stacey and Chris Ivory, Anglia Ruskin University

Hydrogen fuel cell cars emerged as an alternative to both the electric and combustion engine vehicle in the early 2000s. They were widely considered an avenue towards universal green motoring. Powered through a chemical reaction between hydrogen and oxygen, the only tailpipe emission they produce is water.

The technology also promised a traditional driving experience. Drivers can refuel at filling stations and the range of a hydrogen car is

* * Jokes & Quotes Stolen from Everywhere * *

Albert Einstein

The difference between stupidity and genius is that genius has its limits.

We can't solve today's problems with the mentality that created them.

Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it is stupid.

The only thing more dangerous than ignorance is arrogance.

The world will not be destroyed by those who do evil, but by those who watch them without doing anything.

Any government is evil if it carries within it the tendency to deteriorate into tyranny. The danger of such deterioration is more acute in a country in which the government has authority, not only over the armed forces but, also over every channel of education and information.

Information is not knowledge. The only source of knowledge is experience. You need experience to gain wisdom.

Insanity: doing the same thing over and over again and expecting different results.

Knowledge is realizing that the street is one way; wisdom is looking in both directions anyway.

What you can't imagine, you can't discover.

I believe we are here to do good. It is the responsibility of every human being to aspire to do something worthwhile, to make the world a better place than the one we found.

comparable to the combustion engine vehicle. Hydrogen vehicle technology also offered oil companies the opportunity to shift their operations towards the production and transportation of hydrogen and hydrogen refuelling at existing stations.

The <u>UK government</u> reiterated its commitment to the technology in 2016 by investing £2 million in the promotion of hydrogen cars to UK businesses. The European Parliament have more recently agreed to set <u>minimum national targets</u> for the deployment of alternative fuels infrastructure. Under this framework, there will be at least one hydrogen refuelling station every 100km along main EU roads.

But hydrogen cars have now all but disappeared. Toyota and Hyundai, the only vehicle manufacturers to produce hydrogen cars for the UK market, sold just 12 hydrogen cars in the country in 2021. Earlier this year, Shell closed all of its UK Hydrogen refuelling stations.

Meanwhile electric vehicles, despite not delivering the range or the fast refuelling of a hydrogen car, have surged in popularity. In 2010, <u>138</u> <u>electric vehicles</u> were sold in the UK. This grew to roughly <u>190,000</u> annual sales in 2021.

Continue at https://modernsciences.org/the-days-of-the-hydrogen-car-are-already-over/.



When you think of privacy, what comes to mind? Closing your window shades? Keeping your phone screen locked? Shutting the door when you have a sensitive conversation? Learn what data privacy is and how to take action.

What'll be Big in 2023? AI, That's What

In 2022, artificial intelligence chatbots and image generators seemed to take over the Internet, but what can we expect from AI in 2023?

By Dr Simon Coghlan, University of Melbourne

A kind of artificial intelligence (AI) called *generative* AI has vividly captured public attention.

In 2022, many of us were first introduced to – and intrigued by – the capacities of image-generating AI like <u>Midjourney</u>, <u>DeepAI</u> and <u>DALL-E</u> <u>2</u> to produce sophisticated and <u>strange</u> pictures based on 'interpretations' of written input.

Then, later in the year, <u>ChatGPT</u> went viral.

This text-generating AI can produce remarkable sentences and essays in response to virtually any prompt. For example, it can create plausible

Odds and Ends

LastPass Breach: What You Need to Do if You Use the Password Manager

If you're a LastPass subscriber, you need to start looking for a different password manager immediately.

Attila Tomaschek, 1/10/23 LastPass, one of the world's most popular password managers, is yet again the subject of intense scrutiny after its latest security breach. Just before Christmas, LastPass CEO Karim Toubba revealed in a blog post that a security incident the company first disclosed in August had eventually led to an unauthorized party stealing customer account information and vault data. This is the latest in a lengthy string of security incidents involving LastPass that date back to **2011**. It's also the most alarming.

An unauthorized party now has access to unencrypted subscriber account information like LastPass usernames, company names, billing addresses, email addresses, phone numbers and IP addresses, according to Toubba. That same unauthorized party also has a copy of customer vault data, which includes unencrypted data like website URLs and encrypted data like the usernames and passwords for all the sites customers have saved in their vaults.

Read it all at

https://www.cnet.com/tech/ser
vices-and-software/lastpassbreach-what-you-need-to-doif-you-use-the-passwordmanager/.

<u>Bitwarden</u>: CNET's <u>top</u> <u>password manager</u> is a highly secure and open-source LastPass alternative. scenes from <u>Seinfeld</u>, compose decent letters and resumes, suggest diet plans and give (potentially questionable) relationship advice.

For many people, these advances are generally positive. Some have highlighted AI's promise when it comes to <u>making interesting artworks</u> or rapidly writing text to save us time and effort. Others think generative AI could partially replace Google's search engine and allow novices to write computer code.

While all this <u>excitement</u> was going on, there were a few voices of warning. Critics worried about overhyping AI and declared that generative AI could <u>worsen toxic politics</u>, spout nonsense, <u>and replace</u> artists and journalists.

A few, including one of <u>OpenAI</u>'s founders, Elon Musk, claim that "<u>dangerously strong</u>" AI is around the corner. Perhaps the computer scientist who claimed <u>Google's chatbot LaMDA</u> is <u>sentient</u> wasn't so far off the mark after all?

Continue reading at https://pursuit.unimelb.edu.au/articles/what-ll-be-big-in-2023-ai-that-s-what.

The ChatGPT Revolution? Microsoft Seems to Have Very Big Plans for This AI Chatbot

Written by Liam Tung, Contributing Writer on Jan 10, 2023

Microsoft could be ready to spend billions on ChatGPT and extend use of the chatbot through its products, according to reports.

Microsoft is reportedly in talks to invest \$10 billion into OpenAI, the maker of the popular ChatGPT chatbot, according to a report citing people familiar with the deal. Microsoft is weighing up the \$10 billion stake in OpenAI in a deal that would involve multiple venture firms, according to Semafor, which reports documents sent to prospective investors indicated a targeted close by the end of 2022.

Also: What is ChatGPT and why does it matter? Here's what you need to know

The Wall Street Journal <u>reported last week</u> that OpenAI was in talks to sell existing shares in a tender offer that would value it at around \$29 billion.

OpenAI started as a non-profit but in March 2019 created OpenAI LP as a "capped profit" -- a hybrid for-profit and nonprofit -- in order to attract employees and investors and offer them capped returns if it reaches its goals. Any return beyond that amount would go back to the OpenAI nonprofit. OpenAI said at the time it would need to invest billions of dollars in coming years in large-scale cloud computing and AI supercomputers. Then, in July 2019, Microsoft invested \$1 billion in OpenAI in exchange for the startup pursuing Artificial General Intelligence on Microsoft's Azure AI supercomputing technologies.

ChatGPT wowed the world upon its release in November with its natural-sounding answers to prompts about literature, politics, science, and coding, as well as offering follow-up questions.

<u>Google's management has reportedly issued a "code red"</u> alert over the technology for its potential to upend online search.

Also: People are already trying to get ChatGPT to write malware

Read more at https://www.zdnet.com/article/chatgpt-revolution-microsoft-seems-to-have-very-big-plans-for-this-ai-chatbot/.

A new approach for the 3D printing of hydrogel-based electronics

by Ingrid Fadelli, Tech Xplore, January 10, 2023

Hydrogels are three-dimensional (3D) polymer networks that do not dissolve in water but retain large amounts of liquids. Due to this advantageous property, hydrogels are particularly promising material platforms for both biomedical and environmental applications, as they can survive in bodily fluids or in wet natural environments without dissipating.

Over the past decade, engineers and materials scientists have been developing numerous <u>electronic devices</u> based on soft hydrogels, including environmental and biomedical sensors, drug delivery devices, and artificial tissue. Despite the huge potential of these <u>hydrogel</u>-based devices, their widespread implementation has so far been hindered by their high production costs.

A research team led by Dr. Nanjia Zhou at Westlake University and Westlake Institute of Advanced Studies in China have recently introduced a new strategy to enable the 3D printing of soft hydrogel electronics. Their approach, introduced in a paper published in *Nature Electronics*, could help to lower the production costs of numerous

hydrogel-based devices, including strain sensors, inductors, and biological electrodes.

"We choose to study hydrogel production because while most of the current soft electronics are based on flexible elastomers and polymers, undeniably hydrogel is more similar to the https://example.com/humanbody and may lead to better tissue integration and less immune responses," Dr. Yue Hui, one of the researchers who carried out the study, told TechXplore. "As suggested by previously studies, we think that hydrogel is a promising candidate for the creation of future health care electronic devices."

Finish this article at https://techxplore.com/news/2023-01-approach-3d-hydrogel-based-electronics.html.

Trenton Computer Festival, March 18, 2023
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Got Questions?:

Send an email to either person below and they will get back to you. The questions can be related to the OS (Operating System) or hardware related issues. Please give them time for a response, as they do this service on a volunteer basis. Thank you.

Windows OS: Arpad Kovacs, podcomputer@gmail.com

Linux & some Mac: Carl Schmidtmann, unixgeek@faultline.com

New Meeting Place

Our Usual Meeting Place is being renovated.

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 SECOND building on the left –

Chestnut Court.

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