

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. Yes, you may bring the problem computer with you.

7:00 – 7:10, Club Business 7:10 – 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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Feb 11, 'Best of CES 2025', 'Top Research Trends for 2025'

March 11, 'The Effect of Social Media on Children', 'Capabilities of Tablets', 'Current Scams'

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Private Browsing: Is it all it's cracked up to be?

By Chris Taylor, President Ottawa PC Users' Group, Ontario, Canada

Jim Cerny

Sneha Mukherjee

Phil Sorrentino

For well over 10 years, web browsers have offered *private browsing*, designed to keep your browsing—well—

private.

Google Chrome calls it an *Incognito window*, Firefox, Opera & Brave call it a *Private window*, and Microsoft Edge calls it an *InPrivate window*. The easiest way to get



"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.

Digital copies of this newsletter 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:

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 What are Dark Facktories Cut the Cord, Streaming Services 3D Printing, ENABLE project Features, Mac OS X & Windows The New Space Race, 2021 Tech of South America Internet Security and Privacy AI and Digital Assistants **Emerging Technologies** My Favorite Android Apps Gifts and Gadgets for the Holidays there is to right-click the browser's icon on the taskbar and choose the appropriate *New...* item from the pop-up context menu.

When in a private browsing window, browsing history, cookies & site data (such as images and contents of webpages), and information entered in forms are not saved to your computer. Other users on your computer will not be able to see your web browsing activities. When browsing, web servers won't automatically recognize you as a returning user, and you won't be automatically signed into websites.

When you close a private browsing window, the browser discards site data and cookies created during that session. Note that you need to close the private browsing window to remove traces. Until you do, a simple click on the back button will return you to the previous page visited in that window.

Private browsing deactivates extensions. You can enable extensions in private browsing windows if you need them. For example, in Google Chrome, click the kebab menu (:) at the top-right of the window. Choose *Settings*. Find the extension you want to allow in Incognito windows and click *Details* under that extension. Toggle on *Allow in Incognito*.

Private browsing is not a panacea

It does not prevent all tracking. While websites do not have the luxury of using cookies to track you, there are many other means of tracking. For example, a web server can know your operating system, browser version, extensions you have loaded, screen resolution, IP address, and more. These data items can be used to fingerprint and track you.

Private browsing does not prevent ads. It does not prevent malware. It does not hide where you are browsing from your ISP or employer.

As Gizmodo reported in October 2022, *Even Google's Own Staff Thinks 'Incognito Mode' Isn't All It's Cracked Up to Be* - https://gizmodo.com/google-incognito-mode-google-chrome-1849648071

Where is private browsing useful?

If you are using a computer at a public kiosk, it will prevent the next person using the computer from easily seeing where and what you browsed.

If you use multiple accounts on a single website, a private browsing window can help you keep things separate.

If you are using another person's computer, it can be helpful in making it less likely you leave traces behind.

Strangely, I have encountered shopping sites that required private browsing for the checkout process to work properly. I guess they didn't want to sell things to me all that badly.

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/saturdaysafaris/

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: By Judy Taylour

> https://apcug2.org/ jerestips/

Apple Tech Tips:

https://apcug2.org/50-best-mac-tips-tricks-timesavers/

Penguin Platform (Linux):

https://apcug2.org/ penguin-platform/

Chromebook Tips And Tricks:

https://apcug2.org/ chromebook-tips-andtricks/ For more information about private browsing, see https://en.wikipedia.org/wiki/Private_browsing.

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Editor: brigittelord@opcug.ca

Verify the Safety of Websites

By Terry Harvey, Program Chair and Newsletter Editor Wisconsin All-Computer Users Club

Verifying the safety and legality of a website is crucial for online security. Here are some steps to follow:

- Check the website's URL: Ensure it starts with "https://" instead of "http://". The "s" indicates a secure connection.
- Look for security indicators: A lock symbol or the word "Secure" in the browser's address bar confirms a secure connection. Avoid sites with warnings or certificate errors.
- Research the website: Search for reviews, ratings, or experiences other users share. Be cautious if there is a lack of information or negative feedback.
- Check for contact information: Legitimate websites provide valid contact details, including a physical address and phone number. Verify if the information is accurate and reachable.
- Assess content quality: Poor grammar, excessive ads, or suspicious content can indicate an untrustworthy site.
- Review privacy policy and terms of service: Ensure they are transparent, well-written, and provide clear information on data collection, storage, and usage.
- Use website reputation services: Online tools like Google Safe Browsing or Norton Safe Web can check a site's safety rating.

Trust your instincts: If something feels off or too good to be true, it's wise to proceed with caution or avoid the website altogether.

Remember, online safety is an ongoing practice. Stay updated with the latest security measures and use reliable antivirus software for additional protection.

From https://wauc.apcug.org/, terryharvey@wi.rr.com

RCSI Board Members

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Got Questions?:

Windows: Arpad Kovacs podcomputer@gmail.com

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

Planning Meeting

Held on 1st Tuesday of each month at 7 pm, * * ONLINE * *. We will be using Zoom. ANY CLUB MEMBER MAY ATTEND.

Monitor Newsletter

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. 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

The Artificial Intelligence Explosion, an ever-changing topic

By Jim Cerny, 1st Vice President and Hewie Poplock, 2nd Vice President Sarasota Technology Users Group, 4/2024

Artificial intelligence (AI) is a term we've all encountered, and its impact is already evident in various sectors such as business, education, entertainment, art, manufacturing, research, and health care. However, this is just the beginning. The potential of AI to revolutionize our lives is immense, possibly surpassing the transformative effects of computers and electronics. Are you prepared for this future?

Many people see the AI revolution as bringing huge benefits. If you have been using a search engine on the internet to get information you want or need, AI can do more by providing intelligent results to your searches. Try using the following free AI internet sites and seeing the results of your inquiries:

- ChatGPT (https://chat.openai.com/) Chatbot from OpenAI that can have natural conversations and generate human-like text on various topics.
- DALL-E 2 (https://labs.openai.com/) AI image generator from OpenAI that creates images from text descriptions.
- Hugging Face Spaces (https://huggingface.co/spaces) -Platform to build, train, and deploy machine learning models, mainly focused on natural language processing.
- Perplexity (https://www.perplexity.ai/) The answer to any question.
- Anthropic Claude (https://claude.ai/chat/) Conversational AI assistant trained to be helpful, harmless, and honest.
- Gemini (https://gemini.google.com/) is a conversational AI chatbot from Google. It is meant to function similarly to ChatGPT, with the biggest difference being that Google's service pulls its information from the web.
- Co-Pilot from Microsoft. An AI-powered digital assistant that aims to provide personalized assistance to users for a range of tasks and activities. Copilot is integrated with Microsoft Edge. https://www.microsoft.com/en-us/edge/
- Leonardo (https://leonardo.ai) is a generative AI platform that empowers users to effortlessly generate captivating images and artwork.
- NightCafe (https://creator.nightcafe.studio/). Create unique artworks in seconds using the power of Artificial Intelligence.

Since AI is going to affect almost every area of life on this planet, how is AI going to affect you, and how are you going to handle it?

Tidbits of probably useless information

It takes roughly 10 million snowflakes to make an average sized snowman (about 4' tall).

In Switzerland, it's illegal to own just one guinea pig because they're such social creatures.

Finland has the most heavy metal bands per capita.

A chicken once lived for 18 months without a head.

The largest scrambled eggs ever made weighed 6,860.8 pounds.

If every Oreo ever made were lined up, they would reach the moon and back five times.

All the world's bacteria stacked on top of each other would stretch for 10 billion lightyears.

On average, 100 people choke to death on ballpoint pens each year.

Venus is the only planet in our solar system that rotates clockwise.

The average person has four to six dreams a night.

A banana is technically considered a berry.

An average of 3.6 cans of SPAM are consumed each second.

In the 1830s, ketchup was used as medicine to treat diarrhea, indigestion, and jaundice.

The oldest representations of Satan in early Christian art, actually showed him as a blue angel, while the good angels were red. The STUG organization has some experienced AI users who will help guide STUG in helping our members understand and use AI. No matter what your life interest is, AI will affect it. You can start by asking Google or an AI website something like "How will AI affect art?" or "How will AI help with my investments?" or "How do I use AI to create a photo?" Yes, AI already affects all areas of your life, even if you do not realize it. You can watch many videos to learn more about all aspects of AI.

Creative AI can write stories, create works of art, and amaze us. Humans may review what AI has created, "touch it up," or add pieces later. As an example, AI is already affecting those who make their living writing by doing most of the work.

AI technology impacts many industries, transforming how they operate and interact with customers and employees. Here are some sectors that are being heavily affected by AI:

- Retail: AI helps keep track of inventory and can recommend products that each customer might like. Some stores even have robot helpers that can answer customer questions.
- Marketing: AI can predict what customers might want to buy.
 It helps companies show customers suitable ads.
- Insurance: AI can quickly process claims and detect fraud to help the company run smoothly.
- Banking/Finance: Banks use AI chatbots and virtual assistants to make banking more accessible for customers. AI also watches for fake charges on your account.
- Education: AI tutors can adapt to each student and help them learn at their own pace. It can grade papers and free up time for teachers.
- Healthcare: AI is making significant advancements in healthcare, from diagnosing diseases and analyzing medical images to drug discovery and personalized medicine. It has the potential to improve patient outcomes and streamline healthcare processes.
- Manufacturing: AI is integrated into manufacturing processes to optimize production, improve quality control, and enable predictive maintenance. It is revolutionizing the way products are designed, produced, and delivered.

These are just a few examples of industries that AI is heavily impacting. However, it's important to note that AI is a rapidly evolving field, and its impact is not limited to these industries alone. AI can potentially disrupt and transform other sectors, such as transportation, agriculture, energy, etc.

There are also downsides to AI. Many jobs will be affected, and people must adapt to different situations. For example, when steam

Windows & Android Tips by Judy Taylour, apcug2.org

ESSENTIAL WINDOWS 11 TWEAKS: 22 SETTINGS TO CHANGE FOR A BETTER EXPERIENCE – One of the best parts of Windows 11 is the ability to configure virtually (almost) every aspect of the experience in more than one way. Almost, because the company has changed and made some elements (such as the Taskbar) more restrictive. Learn to tweak your Win 11 here My essential Windows 11 tweaks: 22 Settings to change for a better experience | Windows Central

WHY RCS TEXTING IS A BIG DEAL FOR BOTH IPHONE AND ANDROID –

The new Rich Communications Services (RCS) standard that Apple and Google have finally adopted goes a long way towards fixing the incompatibility between their built-in messaging tools. But the RCS standard doesn't solve all of these problems, and there's still work to be done. Learn more at Why RCS

Texting Is a Big Deal for Both iPhone and Android

5 MICROSOFT WORD HACKS YOU PROBABLY DIDN'T KNOW – Make the most of Word's tools with these useful tricks you should know. <u>5</u> <u>Microsoft Word Hacks You</u> <u>Probably Didn't Know</u> trains went to diesel, firemen were no longer needed—and now there are no train cabooses either!

Perhaps a good AI concept summary example could be in the area of law. An AI "lawyer" would have all the knowledge of previous similar court cases and create a perfect prosecution or defensive argument. The judge and jury would have to make the decision. But what if AI makes the decision itself? Would that not be better than any human judge?

Can you imagine more of what AI will do? It staggers my human intelligence!

Reprinted from https://thestug.org/, JimCerny@gmail.com, Hewie@hewie.net

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

A New AI Model Revolutionizing Research and Development By Sneha Mukherjee, 11/2024

Google DeepMind has released Gemma 2, the latest in its line of open-source AI models, offering groundbreaking performance and efficiency for researchers and developers. With two parameter sizes—9 billion (9B) and 27 billion (27B)—Gemma 2 promises to deliver advanced AI capabilities on a range of hardware setups, from consumer-grade devices to high-performance cloud infrastructure.

What is Gemma 2?

Gemma 2 builds on the original Gemma models introduced earlier this year, which were designed as lightweight and open AI systems based on the technology behind Google DeepMind's Gemini models. The new version, Gemma 2, is engineered to deliver cutting-edge performance while being highly accessible, ensuring that developers and researchers from all backgrounds can utilize it.

According to Clement Farabet, VP of Research at Google DeepMind, the 27B Gemma 2 model offers performance levels that compete with models more than twice its size. This performance is achieved with a single NVIDIA H100 Tensor Core GPU or TPU host, a feat that significantly reduces deployment costs while maintaining high computational power. Meanwhile, the 9B model outshines its competitors, including Llama 3's 8B model, making it a leading choice for developers who need efficient, cost-effective solutions for AI tasks.

Tris Warkentin, Director at Google DeepMind, added that the development of Gemma 2 is part of the company's commitment to expanding access to AI technology. "We believe in providing researchers and developers with the tools to innovate and solve real-

Is This for Real?

Funny Award Names For Employee Recognition

Dewey Decimal Award: Most organized

Squirrel Award: Has the greatest stash of stuff in their desk

The Traveling Medic: Aspirin, Tums, you name it, they have it and are always willing to share

Big Kahuna Award: Most time spent surfing the web

Bermuda Triangle Award: For the desk where things go in, but never come out

Most Likely to Have Thought of That! For the person who thinks and prepares for everything

The Early Bird: To The one who always arrives at the office early

The Late Award: For the person who always has a reason they are late

Racehorse Award: For always being the first out of the office at 5

Empty Desk Award: It might be meetings or lunch, but this person seems to never be at their desk

I'll Pencil You In Award:

Least likely to make a commitment

Peacocking Award: For the biggest showoff

The Meeting Hater: They have the courage to say what everyone else thinks

world challenges. Gemma 2 is an extension of that vision, offering power and efficiency in an open, accessible format."

Why Does Gemma 2 Matter?

Gemma 2's performance and efficiency breakthroughs mark a significant step forward in making advanced AI tools more affordable and accessible. For many developers and organizations, running large-scale AI models has typically required extensive computational resources and high costs. Gemma 2 changes this by making it possible to run inference tasks—predictive operations where a model makes decisions based on new data—on cost-effective hardware.

"Gemma 2 brings a new level of performance without the need for massive infrastructure investments," explained Farabet. "This is a game-changer for smaller teams and individuals who want to leverage AI without access to large-scale data centers."

Who is Involved?

Google DeepMind's VP of Research Clement Farabet and Director Tris Warkentin are key figures behind the development and release of Gemma 2. They have worked closely with their teams to ensure that the model not only delivers on performance but is also open and accessible to the broader AI community.

The model is part of a broader initiative by Google DeepMind to democratize AI technology, giving developers from around the world access to state-of-the-art tools that were once the exclusive domain of large tech companies. Gemma 2 follows in the footsteps of the original Gemma models, which have seen over 10 million downloads and inspired a variety of innovative projects.

Where Can Developers Access Gemma 2?

Gemma 2 is readily available through several platforms. Researchers and developers can access the model through Google AI Studio, Kaggle, and Hugging Face. These platforms provide free access to the model's weights, enabling developers to start experimenting with the technology immediately.

Additionally, Google Cloud customers will soon be able to deploy and manage Gemma 2 through Vertex AI, simplifying the process of integrating the model into cloud-based applications. According to Warkentin, this deployment capability, scheduled for next month, will make it easier for businesses to leverage Gemma 2 in real-world scenarios, from customer service applications to advanced research projects.

To help developers get started, Google DeepMind has also launched the Gemma Cookbook, which provides practical examples and step-by-step guides for fine-tuning the model for various tasks. These resources are designed to assist users in integrating Gemma 2 into their workflows quickly and efficiently, regardless of their level of experience with AI development.

Future Medical

Injected Hydrogel Becomes a Bone-Healing Solid When Exposed to Light

By <u>Ben Coxworth</u>, 1/03/2025

Whether they're caused by injury, disease or other factors, missing sections of bone can be quite difficult to replace. A new injectable hydrogel could change that, however, by transforming into a robust bone regeneration material when exposed to visible light.

While bone injuries such as fractures typically heal on their own, large sections of missing bone (known as "bone deficits") often never grow back.

As a result, they typically have to be filled with a piece of bone tissue harvested from one of the patient's leg bones. Not only is this an invasive and painful procedure, it also simply shifts the bone deficit from one part of the skeleton to another. Seeking a more effective alternative, some groups are developing bone-like porous materials that are placed in the deficit instead of real bone.

The hydrogel has been successfully tested on rats with femoral bone deficits. There is currently no word on when human trials may commence.

Check it out at https://newatlas.com/medical-tech/visible-light-bone-deficit-hydrogel/.

Ensuring Responsible AI Development

Google DeepMind has put a strong emphasis on responsible AI development with Gemma 2. The model was trained with rigorous safety processes, including data filtering to reduce biases and extensive evaluation against benchmarks related to safety and ethical concerns.

The company is also providing developers with tools to help ensure the responsible use of Gemma 2. These include the Responsible Generative AI Toolkit and the open-source LLM Comparator, which enables developers to evaluate the performance and behavior of large language models across various safety metrics.

Furthermore, Google DeepMind plans to open-source its SynthID technology, which allows developers to watermark content generated by AI models, ensuring transparency and accountability in AI-generated outputs. According to Warkentin, these initiatives are central to Google DeepMind's broader mission of fostering safe and ethical AI development.

What's Next?

The release of Gemma 2 is expected to fuel further innovation in the AI community. Projects like Navarasa, which focused on language diversity in India, have already demonstrated the potential of the original Gemma models. With the added power and efficiency of Gemma 2, developers will have even more opportunities to create transformative AI-driven applications.

Looking ahead, Google DeepMind is preparing to launch a 2.6B parameter version of Gemma 2, aimed at bridging the gap between lightweight models and high performance. This upcoming version is expected to make advanced AI even more accessible to smaller developers and research teams.

With Gemma 2, Google DeepMind is taking a significant step toward making cutting-edge AI technology more accessible and affordable for researchers and developers worldwide. The model's combination of performance, efficiency, and responsible development practices positions it as a key tool in the ongoing evolution of artificial intelligence.

Sneha Mukherjee is a skilled content writer and SEO specialist based in Scotland. With a Master's in English Language and Linguistics from the University of Stirling, she excels in creative and technical writing. Author of *Lily's Adventures in Sparklewood Forest*, she is passionate about storytelling and digital content, with works featured on Google Discover and multiple platforms.

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Scam Alert

WINDOWS INCLUDES BUILT-IN RANSOMWARE PROTECTION. HERE'S HOW TO TURN IT ON – The

best defense against ransomware is avoiding sites and downloads riddled with it, but you can take other protective measures, too. Modern antivirus software often restrict which apps can change files in folders commonly targeted by ransomware. Microsoft Defender, built into Windows, can do this, too. (Microsoft changed the name from Windows Defender several vears ago, but it's the same program.) How to turn on Microsoft Windows' built-in ransomware protection **PCWorld**

Those expecting a package from the **postal service** have been receiving a text claiming an invalid zip code caused the parcel to be detained. The message says that by clicking a link and confirming the address, the package will be on its way. But U.S. Postal Service officials say think before you click. We will not send you a text or an email saying, 'Hey, click this link,' or, 'We got a package that's missing,' or anything like that. That's not how we do business. If we have a package for you and there's a concern, we'll come to your house, as we do with all the mail.

HEIC File Type - Should I care about this file type?

By Phil Sorrentino, Secretary & Newsletter Contributor Sun City Center Computer Club

HEIC is the name of the file format that Apple uses for images taken with an iPhone or iPad. Even if you don't have Apple equipment, you may have received a picture with the .heic file type from someone with an iPhone. I got one just a few weeks ago. (Though I have read that when a photo is sent or exported from an iOS device to a non-iOS device, the image is typically converted from an HEIC file to a JPEG file.)

HEIC stands for High Efficiency Image Container. Advanced, modern compression methods allow photos to be created in smaller file sizes while retaining a higher image quality than JPEG. Since Apple's release of iOS 11 in 2017, the iPhone has, by default, produced images in the HEIC format, so it's been around for quite a while. HEIC, also known as HEIF, is a more efficient format than JPEG because it creates smaller files, in some cases up to half the size, even though the quality of the images is about the same. (Similarly, High-Efficiency Video Coding (HEVC) is the default video file type for video files for some Apple products.) In switching from JPEG to HEIC, Apple has lowered the space needed to store the image files so they can keep up with the increasing quality and resolution of their smartphone cameras. This has led other manufacturers, including Microsoft and Canon, to embrace the HEIF format. The Moving Picture Experts Group (MPEG) is the developer of the original HEIF and HEVC technologies and JPEG.

An HEIC file contains one or more images saved in the High-Efficiency Image Format (HEIF) and metadata describing each image. HEIC files are most commonly saved with the .hemic extension but may also use the .heif extension. This newer standard offers 25% to 50% better data compression at the same quality level. HEIC allows you to store multiple images in one file. If your phone has burst mode functionality, you can capture multiple high-quality action shots of a moving subject with a single click. Then, with multiple images in a file, you can convert HEIC files into GIFs to make moving animations from your stored sequences of images. (The GIF file type is an animation created from a sequence of still images.)

A brief technical review shows two main types of digital image files: raster and vector. JPG, JPEG, and JPE are all file extensions that refer to the same file format: JPEG is probably the most common name. Each refers to the Joint Photographic Experts Group "Raster Image" file type. Raster Image file types are images produced when scanning or photographing an object. The image is compiled using a matrix of pixels, or tiny dots containing unique color and tonal information, organized into rows and columns, or a grid, that creates the image. Other common Image file types are bmp, png, tiff, and raw (raw being the largest of all the file types).

* * Jokes & Quotes Stolen from Everywhere * *

Jokes about aging:

Jerry Seinfeld famously joked about retirement migration:
"My parents didn't want to move to Florida, but they turned 60 and that's the law."

When you're 20 and you drop something, you pick it up. When you're 80 and you drop something, you decide you don't need it anymore.

The good thing about having a bad memory is that jokes can be funny more than once.

Ethel notices a suppository in Mabel's ear and asks about it. Mabel responds, "Now I think I know where my hearing aid is!"

These are not gray hairs! They are wisdom highlights.

You're not getting older; you're becoming a classic.

The older we get, the earlier it gets late.

George Burns quipped, "I'm very pleased to be here. Let's face it, at my age I'm very pleased to be anywhere."

Lucille Ball suggested, "The secret of staying young is to live honestly, eat slowly and lie about your age."

Will Rogers noted, "Eventually you will reach a point when you stop lying about your age and start bragging about it."

Remember, aging is a privilege denied to many, so keep laughing and embrace the journey with humor and grace! **Wikipedia** provides a comparison between JPEG and HEIF.

And just for completeness, Vector images are made up of points, lines, curves, and shapes based on mathematical formulas. When you scale up a vector image file, there is no loss of quality, so it can be sized to however large or small you need it. When you scale up a raster image, it can become pixilated, blocky, and possibly unrecognizable.

Remember that iOS is Apple's mobile device OS (iPhone and iPad), and MacOS is the Apple computer OS. When Apple added HEIF support to iOS, they also added HEIF support to MacOS. Then, in 2018, Google followed suit by adding HEIF support to Android (smartphones and tablets), and Microsoft added HEIF support to Windows. To open HEIC files in Microsoft applications, however, users may have to manually install the Microsoft HEIF Image Extensions and HEVC Video Extensions packages from the Microsoft Store, though that was not my experience.

If you have an HEIC image on a Windows 10 system that you want to view, locate the file with File Explorer and then double-click the image; if it opens, great. If it doesn't open, right-click the image and select "Open With > Photos." If the Photos app prompts you to download the HEIF Image Extension, click the "Download and Install it now" link to get it free from the Microsoft Store. But if your Windows 10 is up to date, the .heic file will probably open with Photos. Although the Extension software for Images (HEIC Image Viewer, Converter) is free, there is a one-time cost of \$0.99 for the Video Extension software (HECV Video Extensions). (Note that photos here refer to Microsoft Photos, not Google Photos.) If you have Windows 11, you might not notice that the HEIC image is any different than any other picture on your system, most likely because HEIC support is included in the Windows 11 Photos App. You will not notice a difference if you don't have the Show "File name extensions" option checked" because then the file type part of the file name (the part after the. "") is not shown, and you won't see the type of file you are viewing.

HEIC and JPEG have advantages and disadvantages depending on their intended use. The OS developer's and a computer user's point of view may differ. HEIC files take up less space than JPEG files and still produce the same –if not better- quality images. However, HEIC is currently limited to specific platforms and software due to its lack of compatibility and acceptance. In these instances, you may first have to use a converter to convert the HEIC files to JPEG. In the long run, you may not need to care much about the HEIC format, but it will not be a mystery if you find one on your system.

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Odds and Ends

Hidden Feature in
WhatsApp: Why You Should
Consider Turning It Off
Natalia Kudryaytaaya 12/202

Natalia Kudryavtseva, 12/2024

WhatsApp is one of the most widely used messaging platforms, with billions of users sharing text, media, and links daily. A particularly handy feature is its link preview functionality, which automatically generates a snippet with an image and headline for shared URLs. While convenient, this feature comes with hidden risks that could compromise your privacy.

WhatsApp's **link preview** feature is *enabled by default*. Every time you share a link, the app sends a "GET" request to the URL's server to retrieve data for the preview. This includes fetching the website's metadata and any associated images. However, during this process, certain data from your device is also shared with the website.

While your chats remain end-to-end encrypted—even when link previews are active—this data exchange occurs outside the encryption layer. This means the shared website can log your IP address without you ever directly visiting it, and malicious actors use it to monitor your online behavior.

Find out how to disable at https://ccm.net/apps-sites/14201
-hidden-feature-in-whatsapp-why-you-should-consider-turning-it-off/">https://ccm.net/apps-sites/14201

* * * * * 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 <u>or</u> click on the URL in the PDF or web versions of this newsletter.

Electric Wallpaper Could Help Warm Poorly Insulated Homes During Winter

By Adrianna Nine October 24, 2024

The wallpaper is currently being tested in Scotland, where home heating makes up over a third of annual carbon emissions. A collaboration between two Scottish universities and the Glasgow City Council, are testing electric wallpaper as a cleaner alternative to gasbased interior heating. If the trial goes well, it could allow people living in cold climates to keep their homes warm without pumping greenhouse gases into the atmosphere.

The paper contains thin strips of copper and <u>graphene</u> that, when powered, release infrared radiation. This radiation reportedly begins to warm the home within three minutes of being powered on.

Compared with gas-burning mechanisms, which comprise most of Scotland's home heating implements and degrade interior air quality, the electric wallpaper has no effect on the air inside a home. It's also responsible for very little in the way of carbon emissions. When the paper is used in a house connected to a renewable energy source, it becomes a zero-emissions heating mechanism. This is vital to 'Scotland Beyond Net Zero', a group of climate experts from Scottish universities working to support the country's mission of becoming emissions-free by 2045.

Read the whole article on https://www.extremetech.com/energy/electric-wallpaper-could-help-warm-poorly-insulated-homes-during-winter.

Can Science be Both Open and Secure? Nations Grapple with Tightening Research Security as China's Dominance Grows

By <u>Caroline Wagner</u>, January 3, 2025 Professor of Public Affairs, The Ohio State University

Amid heightened tensions between the United States and China, the two countries signed a <u>bilateral science and technology agreement</u> on Dec. 13, 2024. The event was billed as a "renewal" of a 45-year-old pact to encourage cooperation, but that may be misleading. The revised agreement drastically narrows the scope of the <u>original agreement</u>, limits the topics allowed to be jointly studied, closes opportunities for collaboration and inserts a new dispute resolution mechanism.

. This shift is in line with growing global concern about research security. Governments are worried about international rivals gaining military or trade advantages or security secrets via cross-border scientific collaborations. The European Union, Canada, Japan and the United States unveiled sweeping new measures within months of each other to protect sensitive research from foreign interference. But there's a catch: Too much security could strangle the international collaboration that drives scientific progress.

Now, as security provisions change this formerly open relationship, a crucial question emerges: Can nations tighten research security without undermining the very openness that makes science work?

In 1980, China had no patented inventions. By 2022, Chinese companies led in U.S. patents issued to foreign companies, receiving 40,000 patents compared with fewer than 2,000 for U.K. companies. In the many advanced fields of science and technology, China is at the world frontier, if not in the lead.

Emphasis on security can <u>strangle the international collaboration</u> that drives scientific progress. As much as 25% of all U.S. scientific articles <u>result from international collaboration</u>. Evidence shows that international engagement and openness <u>produce higher-impact research</u>. The most elite scientists work across national borders.

Even more critically, science depends on the free flow of ideas and talent across borders. After the Cold War, scientific advancement accelerated as borders opened. While national research output remained flat in recent years, international <u>collaborations showed significant growth</u>, revealing science's increasingly global nature.

This is a doosy, read more at https://theconversation.com/can-science-be-both-open-and-secure-nations-grapple-with-tightening-research-security-as-chinas-dominance-grows-244112.

CLUB and REGIONAL NEWS

Some of you are unaware that I exchange newsletters with the **Cape Computer and Technology Club** located in Cape Town, South Africa https://sites.google.com/view/capecomputerandtechnologyclub/home. Back in the beginning of 2021, I was presenting the technology of each continent, paying special attention to Africa and South America. I dismissed Antartica, the penguins have not got their act together. I contacted the Cape Computer Club and received a response. Their newsletter editor, Chris Clarke and I have been exchanging newsletters since May/2021. Their website was recently redone and has a location showing some of our newsletters. I currently check for research articles at some 35 universities around the world, including the University of Cape Town. Some of the additional research links that I use, were suggested by Chris and occasionally I use some of their articles or get ideas for new ones. I am sometimes sent links to check out on some current technology. If you are interested, and I hope you are,

check out some of the Cape's newsletters on the RCSI Member section of my pcloud website at https://tinyurl.com/tonydel-rcsi.

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

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 SECOND
building on the left –
Chestnut Court.

www.rcsi.org