

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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* * July and August, summer hiatus - No Meetings * *

Sept 9, 'Potluck Video Night', members can bring a 5 to 10 minute video to show [any topic]

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If You Think You Can Spot Phishing Emails, Take This Quiz By Gavin Phillips, 5/27/25

I talk about phishing emails all the time, and how important it is to know how to spot them. But dealing with phishing emails in your inbox can be dicey—which is why I took Google's Phishing Quiz to see if I really know as much as I think.

As it sounds, <u>Google's Phishing Quiz</u> helps you learn to spot the signs of phishing emails. It takes you through ten questions designed to trip you up and make you click something you shouldn't. Though, as Google puts it, "None of the links will work—we don't want to send you anywhere funny!"



"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 Now, Google's Phishing Quiz isn't difficult, but it's an interesting examination of all the issues we face in our inboxes. Some phishing email examples are quite obvious, but others require closer scrutiny.

For example, the first question is a classic phishing email tactic: Hiding a fake email address as what looks like a button with a legitimate link. Everything appears to be above board, but if you hover over the final link, it directs to a completely different URL, taking you outside of Google Drive. That's a clear sign you're heading to a phishing site designed to steal your data.

Other phishing examples were much easier to spot. The second question uses another frequently seen phishing lure: an easy to win prize. This is similar to a competition you've won but never entered, in that the prize seems extremely easy to get your hands on. All you have to do is click the link and enter your information, and you can win whatever is pictured. Google's quiz uses a portable blender and juicer—apparently sponsored by Coca-Cola to lend some legitimacy to the email—but it's all a big scam.

Google's Phishing Quiz Lets You Brush Up Your Skills Without Risk

Although Google's Phishing Quiz is hardly a taxing assault on your actual inbox (where <u>phishing emails and scams are rampant</u>), it's useful to look at these specific examples without the worry that you're actually going to lose your data, send money to someone, or have your accounts stolen.

I like that each phishing example is annotated and clearly explains what to look out for and how that can apply to other types of phishing scams. For example, a fake PayPal invoice requesting several hundred dollars appears to originate from an official PayPal address. You're then relying on spotting the other clear issues in the phishing email, such as the email really being a "Note from seller" rather than an invoice from PayPal.

What makes Google's Phishing Quiz useful is that there are some legitimate emails scattered throughout to keep you on your toes. Once you've spotted a few scam emails or invoices, your confidence invariably builds, so having a legit email that you still have to scrutinize is a useful confirmation of your skills.

How to Spot a Phishing Attack

Google's Phishing Quiz is a genuinely useful reminder of what to expect from a phishing attack, with practical examples to help guide your way. As said, most of the time, it's best to remove phishing emails and other nasties from our inboxes without interacting with them. That way, you're certain to avoid accidentally clicking a link or indicating that your email account is active.

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/ However, from time to time, your email spam filter won't catch something designed to steal your data, which is why you should always check for a phishing attack:

- 1. **Check the Sender's Address**: Phishing emails often come from addresses that mimic legitimate sources but contain subtle differences. Look carefully at the email domain and sender's address for misspellings or unusual formats.
- 2. **Look for Urgent or Threatening Language**: Phishing attempts frequently use scare tactics or urgency, such as warnings of account closure or unauthorized transactions. Be wary of any email that pressures you into immediate action.
- 3. **Inspect Links Before Clicking**: Hover over hyperlinks without clicking to view the URL. Phishing scams usually direct you to unfamiliar or suspicious websites that resemble legitimate ones.
- 4. **Watch for Spelling and Grammar Mistakes**: Professional organizations typically proofread their emails thoroughly. Multiple errors in grammar, spelling, or formatting are red flags indicating a potential phishing scam.
- 5. **Beware of Unexpected Attachments**: Never open attachments from unknown or unexpected sources, as they might contain malware designed to steal your information.
- 6. **Check for Generic Greetings**: Legitimate emails often use your name or specific details relevant to you. Generic greetings like "Dear Customer" or "Account Holder" are common in phishing scams.
- 7. **Assess Requests for Sensitive Information**: Reputable organizations will never request sensitive personal information (such as passwords or financial details) via email. Be cautious of any email requesting confidential data.
- 8. **Verify Independently**: If in doubt, directly contact the purported sender through official channels rather than replying to the email. This simple step can confirm whether the communication is genuine or fraudulent.

Oh, and if you're wondering how I did on Google's Phishing Quiz, I scored 8 out of 10. I must admit that I missed one of the fake links and was over-cautious on another question. Still, better over-cautious than clicking through to a phishing scam!

EDITOR'S NOTE: Make-Use-Of was friendly with APCUG and allowed reprint of their articles, but they have been taken over by <u>Valnet Publishing Group</u>, so I am not sure what the current policy is. I am printing this article with the link

https://www.makeuseof.com/think-you-can-spot-phishing-emails-take-this-quiz/.

RCSI Board Members

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Got Questions?:

Windows: Arpad Kovacs **podcomputer@gmail.com**

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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

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

ZAP Your WiFi Intruders!

By Bob Rankin a Translator for the Technology Impaired offering Free Tech Support

Is your wireless Internet (WiFi) connection being borrowed or hijacked by a stranger? If your home WiFi connection is sometimes mysteriously slow, it might be that a neighbor, stranger (or a malicious hacker) has tapped into your wifi. It happened to me! Read on to learn how to bust bandwidth bandits, and give digital leeches the boot...

Do You Have a Wifi Intruder?

There are many possible reasons why your wireless Internet connection might suddenly slow to a crawl. Someone else in your home may be downloading a huge file, or playing a network-intensive online game. Or it could be leeches. Of course I'm not referring to those icky bloodsucking worms, but rather an unauthorized, parasitical user stealing a portion of your wifi bandwidth.

Anyone with the skills and determination to hack your secured network is likely up to some sort of criminal activity. There are many casual, even "innocent" bandwidth moochers who see an available network and just assume it's OK to "borrow" it. If they are challenged for a password when they attempt to log on, they'll probably just give up and move on to another target. If you haven't bothered to assign a wifi access password, the front door to your network is wide open.

At my previous address, I had Verizon FIOS Internet service installed. And soon after, I noticed cars were stopping in front of my house, and staying for 10 or 20 minutes. After checking my wireless router, I found that Verizon had left it wide open. Without a wifi password, anyone could connect, and these drive-by strangers were doing just

that. I locked down the router's wifi signal with a password, and my daily stream of visitors stopped.

A real cybercriminal is another matter. He is out to steal something of value from you. He may peruse computers on your network for identity and financial information he can use or sell. He may use



your Internet connection to download files illegally or hack other

Tidbits of Probably Useless Information

The most common password is "123456".

The mighty **Mount Everest** was first measured in 1856 by the Great Trigonometrical Survey of India and was deemed to be 29,002 feet tall, according to *Smithsonian* magazine. Today it is 29,031', 8 1/2".

During World War II, then 18-year-old **Princess Elizabeth** was a member of the Women's Auxiliary Territorial Service, making her the only woman in the <u>British royal family</u> to have served in the armed forces and the only living head of state to serve in the Second World War, until her death in 2022.

According to a 2013 study published in *Proceedings of the National Academy of Sciences*, **bottlenose dolphins** each have their own special whistles, which are just like human names.

In 2000, the **Harlem Globetrotters** made the head of the Catholic church an honorary member of their squad. The <u>CBC</u> reported that the team's owner and chairman, **Mannie Jackson**, and some players met with the pope during a visit to the Vatican City where the pontiff was given an autographed basketball and his very own jersey.

Messages from your brain travel along your nerves at up to 200 miles per hour.

networks, setting you up as the fall guy when the crime is traced back to your router. This sort of crook has the tools and skills needed to defeat most WiFi security measures, especially if you have a weak password.

Windows and Apple computers have built-in utilities that show what devices are connected to your network. You can use these tools to look for unknown computers that should not be connecting to your network. Obviously, the first step is to know what devices are authorized. Each authorized computer should be assigned a computer name that you can recognize easily, i.e., "Jane PC" or "Billy Laptop". Other devices, such as printers, will have built-in names such as "HP Model 8610." A smartphone connected to your router may show as "Tim's iPhone" or "Sharon's Galaxy S20". Other common wificonnected devices are streaming boxes (Roku, ChromeCast, FireTV) and digital assistants such as Amazon Echo and Google Home. You should be familiar with what you own.

Detecting Unwanted Wifi Connections

On Windows 10 or 11, open Control Panel, select view by Category, click "Network and Internet" then click the "view network computers and devices" link. (On Windows 7 and 8, click the Start button and type "network" in the search box. Click on the word "Network" which should be one of the first items in the search results.) A multi-part display of connected devices will appear, listing computers, media devices, network infrastructure, and other items connected to your local network. "Computers" will include PCs and Macs. "Media devices" include printers, gaming consoles, smart TVs, and the like. "Network infrastructure" includes your Internet router and/or modem. "Other Devices" will include streaming video players, such as a Chromecast or Roku.

For some reason, connected iPods, tablets and smartphones do not show up here. An unauthorized device will probably be among the "computers" listed, but if (for example) you see an Xbox that doesn't belong to you, you obviously have an interloper. Apple OS X computers have a similar utility. You can access it via Finder > Go > Network. On a Linux computer, the **nmap** command will show connected devices.

Your router's configuration program provides a better view of ALL devices connected to your network. By logging into your router, you can see a list of devices that currently have IP addresses assigned to them. Consult your router's documentation (or Google it) to learn how to access this list. Devices that may appear in this list include desktop and laptop computers, tablets and ebook readers, iPods, smartphones, wireless printers, streaming devices such as Roku or AppleTV, gaming consoles, and television set-top boxes.

Many routers also store logs of past connections, which you can peruse to see what devices connected when you weren't looking. If

Computer & Phone Tips www.apcug2.org

MICROSOFT LOOKS TO
CENTRALIZE ALL
WINDOWS APP UPDATES IN
ONE PLACE – Microsoft wants
to phase out fragmented,
individual updates for third-party
apps across its OS and launch a
central platform within Windows
Update, similar to Android or
macOS. Read more at:
Microsoft Looks to Centralize All
Windows App Updates in One
Place | PCMag

YOUR AT&T DATA WAS LEAKED TO THE DARK WEB: HERE'S WHAT YOU CAN DO – If you're an AT&T customer, it's time to start checking your credit reports and updating your password. Your AT&T credentials are possibly sitting in a database currently for sale on underground hacking forums.

https://www.makeuseof.com/att-data-leaked-dark-web-what-you-can-do/

6 WAYS macOS BEATS **WINDOWS** – macOS isn't the be-all and end-all of desktop operating systems, but there's a reason I've settled on a Mac as a daily driver. I've used and continue to use Windows and Linux regularly, but I always turn to macOS when it's time to knuckle down and get work done. System Stability; No Ads on the Desktop; A Whole-Ecosystem Approach; Closing Your Laptop Doesn't Break Everything; macOS Delivers the Best of Both Worlds; It's a Nicer Place to Be. https://www.howtogeek.com/way s-macos-beats-windows/

you don't know how to login to your router, or you don't know the password, ask your Internet Service Provider for help.

If you discover an unauthorized user on a secured WiFi network, my advice would be to immediately change BOTH your router login password and your wifi access password. Yes, both. And then restart your router. If the intruder re-appears, it's time to contact your Internet Service Provider, or maybe even call the cops.

Real-Time Wifi Monitoring

None of the utilities described so far alerts you when an unauthorized device connects to your network. A third-party utility called Softperfect Wi-Fi Guard does the trick for both Windows and Apple Mac computers. Running in the background, it checks your router's network connections list at intervals that you can set. Popup alerts tell you when a new or unknown device is detected. The free version of this program may not detect all your connected devices, but the paid version (\$19) will.

<u>Wireless Network Watcher</u> is a similar free utility program for Windows that simply lists your connected devices. Optionally, it will beep when a device connects or disconnects from your router.

Another option is <u>Advanced IP Scanner</u>. This is a free network scanning tool that checks your network connections and displays all connected devices. It also gives you access to shared folders, provides remote control of computers, and can even remotely switch computers off.

If you have an iPhone or Android mobile device, the free <u>Fing App</u> will identify connected devices, detect network intruders and run internet speed tests.

And finally, some Internet security suites have a network monitoring feature included. One that comes to mind is Avast Antivirus. After opening the user interface, click the Protection button, then the Wi-Fi Inspector button. It does list connected devices, but doesn't identify them as clearly as other tools. My Acer desktop computer was identified as "Netgear"; an iPhone on the network was identified only as "Apple"; and my wifi-connected HP printer showed up as a "generic computer".

https://askbobrankin.com/zap_your_wifi_intruders.html



Is This for Real?

HOLIDAYS

We are now moving towards more of a serious but very interesting **holiday that is celebrated in Scotland**. On this holiday, the locals march around the fire. The interesting part is that they get dressed like proper Vikings and hold torches in their hands while walking on the streets.

Thaipusam is a Hindu holiday and people worldwide celebrate it with enthusiasm and devotion. The weird thing about this holiday is that people pierce their bodies and even tongues with skewers and nails.

Day of Deceased, It is a very interesting day because, on this day, the people of Mexico literally get dressed as skeletons. And they visit cemeteries.

Tomatina Festival, every year, on the last Wednesday of August, more than 20,000 people gather in Bunõl, Spain, and they throw tomatoes at each other.

Yadnya Kasada, people of East Java celebrate this holiday by climbing to the mouth of an active volcano and throwing their cattle and crops in it. This holiday basically is a sacrifice to please the Gods.

Balls of Fire, is one of the most dangerous holidays because the locals of Nejapa make balls of fire and throw them at each other at night. The collateral damage after this festival is huge.

LibreOffice Basic Programming Using ChatGPT

By Alan German, Treasurer Ottawa PC Users' Group, Ontario, Canada APCUG US Region 1 (NY), Australia and Canada

ChatGPT (https://chat.openai.com/chat) is an artificial intelligence (AI) tool that, amongst other things, can create text based on a request from an end user. So, I thought I would use it to write an article for the newsletter by entering "Write an article for OPCUG's newsletter on LibreOffice Basic Programming." Had I gone ahead with this, you would now be reading the following:

"LibreOffice is a free and open-source productivity suite that provides several applications, including Writer, Calc, Impress, and Base. These applications are designed to provide a comprehensive set of tools to meet the needs of any user. LibreOffice also comes with a built-in programming language called LibreOffice Basic, which allows users to automate tasks and create custom solutions to enhance the functionality of the suite."

But, first let me explain the scenario. I have a LibreOffice document (ODT file) that contains the lists of topics that have been covered over the past three years in our weekly online Q&A sessions. Each week, I build an agenda for the upcoming session as a simple text file (TXT) that lists the titles of the topics to be discussed next. This text file is used for various purposes, one of which has been manually adding the list of new topics to the main ODT index file. I wanted to automate this latter process by developing a macro that would read the topics from the text file and add them to the end of the ODT file.

I don't know all that much about object-oriented programming, so, when I want to create a macro for a document in LibreOffice Writer, my practice is to use Google to search for code extracts that I can then modify and string together to produce the final product. And, this is precisely what I did to build the required macro in this case.

But then I saw a YouTube video of an individual using ChatGPT to create computer code in a number of programming languages by simply telling the AI bot what was required. Now, perhaps LibreOffice Basic is a bit of a backwater item in terms of mainstream programming, but I figured that it would be worth a shot to see if I could use ChatGPT to develop the code for my macro.

I know how to read and write lines of text from an ASCII file. My problem is that the ODT file isn't a simple text file. The ODT format is a special type of ZIP file that contains a number of XML and other components. So, the trick is to have the macro open the ODT file, identify the component that contains the body text of the document, add the desired lines at the end, and close the file.

At present, it's possible to use ChatGPT at no cost. All that is required is to create an account on the system or login using an established Google account. Once logged in, one enters a request as a string into a text box. My request was "*Write a program in*

Future Medical

Your Next Therapist Could Be an AI Chatbot—But Should They Be?

By Hannah Jeon, 6/20/25

Artificial intelligence is changing the field of mental health care as we know it. But do its benefits outweigh the downsides—and could it ever replace human therapists?

As I get comfortable on the couch, my therapist reminds me that I can talk to them without any fear of judgment whenever I'm feeling stressed or anxious. "I'm always here to listen to you and help you vent," they say, before guiding me through a mindful breathing exercise.

It seems like any regular conversation someone would have in a standard therapy session—except that my "therapist" is actually a cute little penguin named Wysa, and I'm conversing with it through chat bubbles on a phone screen.

Wysa is an AI chatbot designed to provide around-the-clock mental health support—and it's not the only one of its kind. Search "mental health chatbot" or "AI therapy" in the app store, and you'll find numerous apps leveraging artificial intelligence to provide a "mental health ally" or a "pocket counselor" you can talk to 24/7.

Read this article in https://www.prevention.com/he alth/mental-health/a65045817/ mental-health-ai-chatbots-therapy/.

LibreOffice Basic to add a string to the end of an odt file." The result was amazing – as shown, in part, by the following:

Certainly! Here is an example of how you can do this in LibreOffice Basic:

1. Open the odt file that you want to modify using the '**Load**' method of the '**Desktop**' object.

Dim oDoc As Object oDoc = ThisComponent.Load("/path/to/file.odt")

2. Retrieve the document's text object using the 'get Text' method of the 'oDoc' object.

Dim oText = oDoc.getText

ChatGPT effectively produces a custom tutorial on building the macro. Each required step in the process is explained, and the relevant code extract displayed. Finally, all the code that has been developed for the requested macro is shown as a complete block:

Sub AddStringToODTFile

Dim oDoc As Object Dim oText As Object Dim oEnd As Object

'Open the document oDoc = ThisComponent.Load("/path/to/file.odt")

'Retrieve the text object oText = oDoc.getText

'Insert the string at the end of the document
oEnd = oText.getEnd
oText.insertString(oEnd, "This is the string that will be
added to the end of the file.", False)

' Save the modified document oDoc.store

End Sub

In essence, this code segment is very close to the macro code that I had produced over some considerable time, having had to research several web postings to identify the required techniques. Clearly, it is very generic code and only covers part of what is required for the final macro. But, it is evident from this simple test that the AI bot is fully capable of generating "modules" of code that can readily be adapted for the desired purpose and that such modules could be quickly consolidated into a fully functional macro.

The other consideration is that the current version of ChatGPT is at an early stage in the development of AI tools. As such applications become more sophisticated and the computer systems running them

Scam Alert

SIM Swapping Attacks
Expose Your Online
Accounts to Hackers — but
Your Phone Carrier can
Help

Zack Whittaker, July 9, 2025
It's 2025, and cell phone
numbers are ubiquitous. We use
our phone numbers to sign up
for websites and online
services, from retail and
banking to social media and
health providers. You can use
your phone number to reset a
forgotten password, and even
for receiving two-factor
authentication codes for
securely logging in to your
accounts.

But if someone can steal your phone number, they can effectively become you.

To combat these kinds of impersonation and deception tactics, known as <u>social</u> <u>engineering attacks</u>, three major phone carriers in the United States — AT&T, T-Mobile, and Verizon — have introduced security features that make it more difficult for malicious hackers to deceptively get a customer's account changed, such as porting out their phone number.

Take a minute or two to check your phone carrier's account; these features are often not publicized very well and may not be enabled by default.

Found on https://techcrunch.com/2025/07/09/how-to-protect-your-cell-phone-number-from-sim-swap-attacks/.

become more powerful, it is highly likely that their use in computer programming will become ubiquitous.

Even now, ChatGPT is perfectly capable of developing useful code in a number of popular programming languages. For example, in addition to producing macros for LibreOffice Basic, it is just as easy to develop Python scripts. So, ChatGPT is a useful tool for anyone seriously developing programs, macros, and scripts, and is a really interesting option for those who wish to learn the techniques.

Published in Ottawa PC News (08/23), https://opcug.ca, brigittelord@opcug.ca.

* * * * * 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.

UK and France Unite Behind €1.5B Plan to Boost Europe's Rival to Starlink

Eutelsat is getting some serious government backing, 7/10/25

The UK government reportedly plans to invest €163mn in French satellite firm Eutelsat as Europe pushes to back a local alternative to Elon Musk's Starlink. Eutelsat has received significant attention this year, as European leaders scramble to reduce their reliance on Starlink, especially in Ukraine, which has become highly dependent on the service in its war with Russia.

The French firm operates the third-largest satellite communications fleet — 653 satellites orbiting the Earth, each circling about 1,200km above the surface. The company previously told TNW that, in Europe, it offers the same coverage and latency capabilities as Starlink. In June, French Finance Minister Eric Lombard described his country's investment as part of its broader ambitions to build a competitive, resilient, and sovereign space industry.

It could also help the company contribute to the deployment of IRIS2, a European public-private satellite internet constellation expected to switch on in 2030. IRIS2 is a European attempt to create a truly sovereign satellite communications system. The constellation will build upon Eutelsat's existing fleet and that of SES, a satellite firm from Luxembourg.

Read more at https://thenextweb.com/news/uk-and-france-unite-behind-e1-5b-plan-to-boost-europes-rival-to-starlink.

* * Jokes & Quotes Stolen from Everywhere * *

Volcanos:

What did one volcano say to the other during a breakup? "Lava you, but I need my space!"

What did the volcano say to the geologist? "You rock my world!"

How do you know if a volcano is happy? **It's bubbling with joy!**

How do volcanoes invite their friends over? **They send out "hot" invitations!**

What did one volcano say to the other on their wedding day? "Let's have a "fiery" future together!"

How do volcanoes throw a surprise party? **They "erupt"** with excitement!

Why did the volcano go to the doctor? **It had a burning sensation!**

What did one volcano say to the other during an argument? "You make my lava boil!"

Why did the volcano become a poet? It had a "lava"-ly way with words!

Why did the volcano become a chef? It loved cooking with "flaming" passion!

Why did the volcano become a detective? It loved solving "smoking" hot cases!

What did the volcano say when it went on a diet? "I'm cutting down on "hot" stuff!"

Crystal-Powered Transistor Could Replace Silicon and Supercharge AI

By Institute of Industrial Science, The University of Tokyo, 6/28/25

In a potential turning point for microelectronics, scientists in Tokyo have crafted a powerful new transistor that ditches silicon in favor of a crystalline material called gallium-doped indium oxide.

Engineered with a gate-all-around design—where the transistor's control gate wraps completely around the current channel—this tiny device achieves remarkable electron mobility and long-term stability. The result? A breakthrough transistor that could dramatically boost performance in AI and big-data applications, and keep Moore's Law alive in a post-silicon world.

Transistors are often called one of the greatest inventions of the 20th century. They're essential to modern electronics, acting as tiny switches that control and amplify electrical signals. But as our devices get smaller and faster, traditional silicon-based transistors are struggling to keep up. Are we nearing the limits of how small and powerful our electronics can become?

A team of researchers at the Institute of Industrial Science, The University of Tokyo, believes there's a better path forward. Instead of relying on silicon, they built a new kind of transistor using a material called gallium-doped indium oxide, or InGaOx. This special material can form a highly ordered crystal structure that helps electrons move more efficiently—something crucial for performance.

The efforts shown by the team have provided the field with a new transistor design that considers the importance of both materials and structure. The research is a step towards the development of reliable, high-density electronic components suited for applications with high computational demand, such as big data and artificial intelligence. These tiny transistors promise to help next-gen technology run smoothly, making a big difference to our everyday lives.

Easier to read version on https://scitechdaily.com/crystal-powered-transistor-could-replace-silicon-and-supercharge-ai/.

Scientists 3-D Printed a Tiny Elephant Inside a Cell By <u>Emily Conover</u>, July 8, 2025

The elephant is among the first structures ever printed inside living cells.

For the first time, scientists have 3-D printed objects within living cells, including a 10-micrometer long elephant and tiny "barcodes" that could help track individual cells. Remarkably, many of the cells

Odds and Ends

ChatGPT Takes on a 1977 Atari at Chess ... and it Doesn't go Well

By David Szondy, 6/15/25

ChatGPT volunteered to play a 1977-vintage Atari 2600 to a game of chess and came to regret it after the eight-bit chess engine from the age of Disco Fever and the introduction of the Force did better than expected. A lot better.

On a LinkedIn post, Citrix software engineer Robert Caruso related how he entered into a conversation with ChatGPT about the history of AI in chess, that led to it offering a game with Atari Chess.

The AI had trouble keeping even the most basic aspects of the game straight. It confused rooks for bishops, overlooked pawn forks, and forgot where pieces were. Even when the gameplay swapped to standard chess notation, it still played like a fish as it made lemon after lemon, as chess enthusiasts would say.

As to the Atari, it just kept plugging away while Caruso spent 90 minutes stopping the AI from making multiple blunders until it finally conceded the match.

Read the article at https://newatlas.com/computers /chatgpt-takes-1977-atari-didntgo-well/.

lived to tell the tale, researchers reported in a paper submitted June 16 at arXiv.org.

"It's amazing to see that some of the cells actually do survive," says biophysicist Kerstin Göpfrich of Heidelberg University in Germany, who wasn't involved with the research. "Honestly, I wouldn't have thought this. If you told me I would have been like, 'Nah, never.'"

The researchers used a technique called two-photon polymerization, in which a liquid resin called a photoresist solidifies when it absorbs two photons from a laser simultaneously. The laser's light is focused enough to produce that double whammy only in a small volume. That makes it possible to create incredibly detailed microstructures by moving the location of the laser's focus.

Scientists have previously implanted trinkets in cells via the process of phagocytosis, in which a cell swallows up a foreign object. But only certain varieties of cells are keen gobblers. 3-D printing has the advantage of working in other types of cells. Scientists aren't sure vet how the technique will be useful, but it opens up possibilities, Göpfrich says. "It's a way to interact with cells without genetically modifying them."

Read this article at https://www.sciencenews.org/article/3d-printelephant-inside-cell.

A Bionic Knee Integrated Into Tissue can Restore Natural Movement

Anne Trafton | MIT News, 7/10/25

In a small clinical study, users of this prosthesis navigated more easily and said the limb felt more like part of their body. Watch Video.

MIT researchers have developed a new bionic knee that can help people with above-the-knee amputations walk faster, climb stairs, and avoid obstacles more easily than they could with a traditional prosthesis.

Unlike prostheses in which the residual limb sits within a socket, the new system is directly integrated with the user's muscle and bone tissue. This enables greater stability and gives the user much more control over the movement of the prosthesis.

Participants in a small clinical study also reported that the limb felt more like a part of their own body, compared to people who had more traditional above-the-knee amputations.

"A prosthesis that's tissue-integrated — anchored to the bone and directly controlled by the nervous system — is not merely a lifeless, separate device, but rather a system that is carefully integrated into human physiology, offering a greater level of prosthetic embodiment. It's not simply a tool that the human employs, but rather an integral

part of self," says Hugh Herr, a professor of media arts and sciences, co-director of the K. Lisa Yang Center for Bionics at MIT.

This bone-integrated system, known as e-OPRA, transmits AMI signals to a new robotic controller developed specifically for this study. The controller uses this information to calculate the torque necessary to move the prosthesis the way that the user wants it to move.

Read this medical break through at https://news.mit.edu/2025/bionic-knee-integrated-into-tissue-can-restore-natural-movement-0710.

Over 150,000 people undergo amputations of the lower extremity in the United States each year.

CLUB and REGIONAL NEWS

RIT Researchers Develop AI-based Textile Recycling System

by Andrew Hawthorne, Updated: July 2, 2025

Researchers at the Rochester Institute of Technology are developing a high-speed automated system to disassemble and recycle clothing.

The process uses lasers and an AI-system to identify non-recyclable materials and cut them off the recyclable cloth, then sorts the cloth to be recycled. The system can identify large non-recyclable parts, like buttons and zippers, and find the fiber composition of the whole item, according to an <u>article</u> by RIT.

The system uses an AI program developed by research team members Sri Priya Das and associate research professor Abu Islam. The AI can recognize details such as logos, collars, and cuffs to identify what the item might be.

According to the article, researchers are working alongside clothing manufacturers to develop this system. The nonprofit Goodwill provides clothing for testing, and sportswear giant Nike gave industry advice to make the process replicable in the project's early stages. Researchers are also working with Ambercycle, a textile recycler that works to make polyester manufacturing carbon-neutral.

As of last month, the project is doing pilot tests of the system and expects to begin deploying the process this year. According to the RIT article, the technology has already found interest from recycling companies in the U.S. and internationally.

Check this out at https://resource-recycling.com/plastics/2025/07/02/rit-researchers-develop-ai-based-textile-recycling-system/.

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, <u>podcomputer@gmail.com</u>

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.

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