



An International
Association of Technology
& Computer User Groups

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



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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 non-members. 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.

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

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Another Look at Artificial Intelligence

By Joel Ewing, President
Bella Vista Computer Club

(For a general description of artificial intelligence, also see the article "What Is Artificial Intelligence" in the April 2019 edition of the BVCC *Bits & Bytes* at <https://bvcomputerclub.org/PDF/B&B/2019-04.pdf>)

Background

Although having a background in Computer Science, I do not consider myself an expert on AI; but like many, I have seen over the last decade the improved (but not perfect) ability of smartphones to translate the spoken word into written text, chatbots on the Internet and telephone call centers that can briefly make you think you have reached a human, and the fairly sophisticated behavior of "self-



"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:

- 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
- 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

driving" cars, including some experiments with autonomous self-driving vehicles in restricted environments.

When in full "self-driving" mode, a Tesla car can recognize enough of the environment around it to sense and follow lane markings, sense other vehicle types and their relative speeds on all sides, interpret speed limit signs, stop signs, stop lights, a variety of warning signs, speed limit signs, adjust speed for sharp curves and slower vehicles, to make decisions on passing slower vehicles. When navigation mode to a destination is engaged, an extensive road map database allows it to know when to turn and what lane it needs to be in for the next turn, to suggest the optimal super-charger stations for long trips, and to automatically pre-condition the battery temperature for optimal charging speed before arriving at a charging station to minimize charging time. Yet with all that sophistication, Tesla's most important safety features are (1) monitoring the human driver for alertness and (2) alerting the human driver to take over if the road conditions go outside the bounds the automation can reliably handle. This is great for removing much of the monotony of long-distance driving on consistently marked interstate highways but not so valuable for city driving, where road repairs, obstructions, and local driving customs tend to demand more human interaction.

The topic of AI was recently raised in a professional computer-related online discussion list I follow. I have also been involved in a church-related Religion & Science group meeting on Zoom over several years that have discussed, among other topics, whether humans are the only life forms on Earth that are conscious or aware, AI, and whether machines could ever cross the thresholds of self-awareness and become aware and direct competitors of humans, possibly even a threat. Some of the following thoughts come from those discussions.

AI Current Capabilities

AI may easily surpass humans in the ability to analyze and deduce conclusions from a large amount of data and propose actions – it already has done that in some areas that are sufficiently limited in scope.

AI is already being utilized to assist in medical diagnosis, such as interpreting medical scans, where large scans may need to be analyzed tediously to look for minor anomalies.

Many Internet search engines utilize some AI techniques to improve the quality of the results.

Some of the more interesting recent free Internet search additions are ChatGPT, BardAI, and BingAI, which can accept queries in natural language and return paragraph responses that appear appropriate, almost human-like. It is possible to request responses in the form of specific types of poetry (ChatGPT) or to request the creation of an image featuring certain objects (BingAI).

Without getting too much into details, at least two main techniques are involved under the covers for the deep learning of advanced AI: trained digital neural networks and large databases created by analyzing many natural language sources of information.

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/saturday-safaris/>

Tech for Seniors

[https://
www.techforsenior.com](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/](https://apcug2.org/jerestips/)

Apple Tech Tips:

[https://apcug2.org/50-best-
mac-tips-tricks-timesavers/](https://apcug2.org/50-best-mac-tips-tricks-timesavers/)

Penguin Platform (Linux):

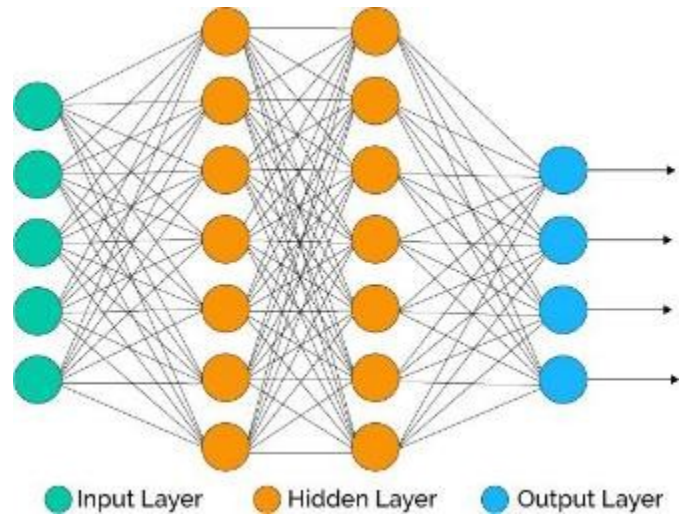
[https://apcug2.org/
penguin-platform/](https://apcug2.org/penguin-platform/)

Chromebook Tips And Tricks:

[https://apcug2.org/
chromebook-tips-and-
tricks/](https://apcug2.org/chromebook-tips-and-tricks/)

Digital neural networks attempt to emulate the brain's design on a small scale. The idea is that you have a large number of nodes (neurons) that are interconnected to nearby layers of the network, but that each of the interconnections can be adjusted by giving a "weight" to each of the connection paths

to determine what strength of incoming signals is sufficient to activate the neuron. To "teach" a neural network, you must supply many different combinations of input signals (on the left), for which the



desired output (on the right) is known, and modify the weights so that the correct outputs are obtained for as many as possible, hopefully, all, input value combinations. This is a computationally expensive and, thus, energy-intensive process, but once the best weights are obtained, it is easy to replicate the neural network. The illustration on the right only has 23 nodes. A useful neural network may have thousands of nodes.

Neural networks are particularly useful for cases without clear written rules for arriving at the outputs, like pattern recognition of images and sounds, interpreting the ambiguous parts of natural language speech and text, and predicting large social system behavior like the stock market. While it can be hoped that a new combination of inputs not used in the training process will also produce reasonable outputs, this is not guaranteed and heavily depends on how the training data was chosen. Another drawback of neural networks is that there is no way to explain how they arrived at any specific output from some specific input.

It is clear from ChatGPT's behavior that it has access to an extensive database of contemporary and historical literature. Whether that does or should include those materials still under copyright protection is debated as to whether that violates fair-use restrictions. To be of greatest use, the natural language must be parsed to determine what is being discussed (nouns) and related descriptions (adjectives) and actions (verbs) and deduce further relationships. From that, it is possible to produce indexes and statistical probabilities of relationships. Applying a similar parsing to information requests, it is possible to either find sentences or paragraphs relevant to the query or (more complex) possibly construct "original" relevant sentences based on known associations with the query topic.

RCSI Board Members

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Mark S. Lawson . . 544-5377
msslawson51@peoplepc.com

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jerry@jerryseward.com

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webmaster@rcsi.org, 9/24

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Tony Dellelo 734-6149
Programs & Monitor editor
tonydel@techie.com, 9/25

Got Questions?:

Windows: Arpad Kovacs
podcomputer@gmail.com

Linux & some Mac:
Carl Schmidtman
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

AI Limitations

One problem that needs to be addressed is that a considerable amount of data is loose in the real world, which is misinformation, and too much garbage in still produces garbage.

Many humans have problems telling the difference between fact and fiction and between reality and conspiracy theories. Humans have biases in their data choices, yet they will choose the data sources to program future AI. This will inevitably cause some problems.

Every year, you find people, sometimes prominent people, that stumble across a parody or satire written in the style of a news article, mistake it for real news, and make a fool of themselves by calling others to take action against the alarming "news" they have just uncovered. Such humor is usually so over-the-top that it is easily recognized by ordinary people aware of current events. However, some still take it as factual, even if it is on a website like "The Onion," which is well-known for only publishing imaginary news releases.

One needs to understand that while AI can provide helpful guidance within the realm for which it has been trained, it is not infallible. If you ask a neural network to categorize an unexpected combination of inputs, it may make an incorrect identification. Suppose you ask an AI system trained from analyzed text about a topic that lacks accurate information. In that case, it may make incorrect inferences from data that it thinks are similar because they appear statistically related. Even if it has processed relevant information, it may not be able to accurately interpret context, implicit relationships, and time ordering of relationships. If you ask an ambiguous question ("Show me something like X"), the AI may not understand the distinction between creating something fictional that looks like "X" versus finding a fact like "X."

There have already been at least two instances reported in the news of a judge berating attorneys for submitting supporting briefs referencing legal precedents that didn't exist because some AI system created a plausible fictional reference to support their legal argument.

The general public is already indifferent to AI's limitations and abusing AI: asking questions of AI apps in areas where the AI is poorly trained and trusting without verification of fallible responses as being authoritative because a machine produces them. Some newsworthy cases of this abuse have been reported when fatalities result after owners of cars with AI autopilots requiring supervision find ways to entrust the AI with unsupervised autonomous driving, and a crash occurs when the AI encounters situations it is not designed to handle.

Could AI be Dangerous

Some theorize that if we could build a neural network of enough complexity – many orders of magnitude larger than possible today – at some point, a threshold might be passed. That creation might become self-aware and possibly worthy of being called sentient. What discoveries such a tool could make and create! The problems are multi-fold: If it has more knowledge than any human and can exercise creative thought faster than any human, its analysis of human history may lead it to the conclusion it should be the master, not the enslaved person, of humans. This has long been a persistent cautionary theme of science fiction writers. In the fictional Dune

Tidbits of probably useless information

HOW MANY STEPS:

The **Leaning Tower of Pisa** (nearly four degrees) has 296 steps to the 7th floor observation.

Climb up a corkscrew of 354 triangular steps to the crown of the **Statue of Liberty**.

Most visitors choose to take the 26 story elevator to the top of **Chimney Rock**, but ambitious travelers can climb 491 steps.

There are 896 steps to the top of the **Washington Monument**.

The **Eiffel Tower** has 1665 steps to the top, but visitors are only allowed to climb steps to the second floor observation deck (674 steps).

You can enter the WWF-Canada's **CN Tower** Climb for Nature and climb part way up to 1776 steps.

It is 1860 steps to the 102nd floor observation deck of the **Empire State Building**.

If you are feeling fit, then try the 2109 steps to the top of the 103rd floor observation deck of the **Willis Tower** (Sears).

Visitors are not allowed to take the 2909 steps to the 160th floor, but can ride the elevator to the 124th floor observation deck of the **Burj Khalifa** (Dubai).

Nieson Mountain (Switzerland) holds the Guinness Book of World Records for the longest stairs with 11,674 steps. These are for maintenance workers, but once a year the stairs are opened for the Niesen Stairway Run.

prequel "The Battle of Corrin," where sentient machines and humans have long been at war, there is a fictional quote from the sentient robot Erasmus: "Humans were foolish to build their competitor – but they couldn't help themselves."

Suppose we were to succeed in creating machines that could truly approach the complexity and creativity of the human mind. Might they not also be subject to some of the same dangerous mental instabilities as human minds when confronted by conflicting "facts" or subtle design deficiencies? Fatal problems like those afflicted the fictional HAL 9000 in "2001: A Space Odyssey" and the M-5 Multitronic computer in "The Ultimate Computer" Star Trek episode. I don't think we are at any risk within my lifetime of finding a way to cross that threshold, but that doesn't mean that we shouldn't be concerned that AI in its present state has the capability of causing harm.

AI-based tools used by financial institutions to evaluate whether to approve or deny credit requests have been found to exhibit bias against granting loans to those in minority groups. The AI tools were programmed using data about loans that had been approved subject to historical biases against minorities. Without great care in programming, AI can be used to justify that there is no bias when the reality is that the bias was included in the AI programming and is just more hidden.

Another way we are already seeing AI being abused is by its use to create and spread misinformation on the Internet. While not perfect, it is already good enough to produce deep-fake video and audio and false news reports and control bots on social media networks that spread messages to promote and amplify division and hate. There is some hope that it may be possible to employ AI on the other side to detect and suppress such abuse, but that does require corporations to accept that responsibility.

Another area that should be a serious concern is the possibility that AI could be given the power to make and implement life-and-death decisions without adequate human oversight or just to propose actions that humans might blindly follow in a life-or-death situation. The science fiction genre is full of plots suggesting how badly this can go – possibly human enslavement or extinction.

When you grant AI the power to make decisions and take actions in the real world, most of us want "intelligence" involved, wisdom, and morality. Most of us want decisions made by others that impact our lives to be constrained by a moral compass of what is right and fair. We have no idea how to build that awareness into AI, and since there is no universal agreement on whose standard of morality to use, that may be an impossible task. Even if there was agreement on how to define morality and how to embed that concept into AI, do we trust fallible humans to consistently implement that design without error?

A legitimate concern is that if future AI regulation or its enforcement is inadequate, some individual or corporation with more power and money than wisdom may go rogue, ignore whatever AI restrictions are in place or commonly accepted, and create a dangerous AI device because of a belief it will enhance their short-term profit.

Windows & Android Tips by Judy Tylour

IS SOMEONE MIRRORING YOUR SMARTPHONE? HERE'S HOW TO

CHECK – Smartphones are no less susceptible to cyber threats than computers, and it can be argued that smartphone security deserves more attention than it typically gets. Besides, it's not just malware that you need to worry about; there's also smartphone mirroring. But what exactly is smartphone mirroring? How can you tell if someone is mirroring your smartphone, and what can you do about it? Learn about smartphone mirroring at [Is Someone Mirroring Your Smartphone? Here's How to Check \(makeuseof.com\)](https://www.makeuseof.com/2021/05/12/is-someone-mirroring-your-smartphone-heres-how-to-check/)

8 THINGS TO NEVER STORE ON YOUR

SMARTPHONE – Back in the days of yore, leaving your house meant you needed to carry your wallet, which almost invariably contained your cash, a form of picture identification, your insurance card, your credit cards, photos of your kids, maybe even a spare check. These days, you have to ask yourself if you even need to own a wallet. After all, there are quite a few things that you should immediately stop keeping in your wallet (if you haven't already). But even more importantly, don't you store most of that stuff on your phone?

[Things to Never Store on Your Smartphone | Reader's Digest \(rd.com\)](https://rd.com/2024/05/12/things-to-never-store-on-your-smartphone/)

We must be very cautious about what kinds of decisions and actions we entrust to AI in the short and long term. We also need to research how best to enforce that caution. Perhaps future AI, appropriately applied, might even become part of the solution.

From the February 2024 issue of Bits & Bytes,
<https://bvcomputerclub.org>, president@bvcomputerclub.org.

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

Kretchmar's Korner

Snipping Tool, At Last - a Reason to Upgrade to Windows 11!

by David Kretchmar, Hardware Technician

Microsoft needed a win after its confusing efforts to replace Windows 7 with Windows 8 and Windows 8.1. Windows 10, introduced in 2015, is a great operating system that picked up and continued to develop the sorely needed improvements in security that were incorporated into Windows after Windows 7. Windows 10 also managed to recapture some of the intuitive comfort that many users came to enjoy in Windows 7.

In 2021 Microsoft introduced Windows 11. Many felt it was more in keeping with Microsoft's apparent six-year Operating System (OS) cycle rather than any real need for a new OS. Windows 11 is certainly "prettier" than prior Windows OSs, with rounded corners and a more symmetrical (like Apple?) look, but for most users it was a big meh. Those of us who bothered to read the End User License Agreement (EULA) for Windows 10 and 11 confirmed that Microsoft was moving more and more toward a subscription-based service. And you thought you owned your OS!

Finally in early 2024 Microsoft quietly made improvements to the Windows 11 OS that were worth the price of admission: the new

You can now capture any video and sound that you can get through your computer.

Snipping Tool. In Windows 10 this tool was renamed Snip & Sketch and allowed you to take a snapshot of any area that appeared on your

monitor. This was a vast improvement over the "Print Screen" key that allowed users to take a snapshot of everything that appeared on the monitor. Many Windows users, including me, have found the Snipper Tool in all its iterations to be an asset - that is how I obtain all the graphics I use in my articles.

Now, in the Windows 11 Snipping Tool, you can capture any video and sound that you can get through your computer. There has always been third-party software available, some even "free" (for those of us who still believe there is such a thing as a free lunch), but never has Microsoft incorporated such a powerful recording tool into an OS. Users wanting to build their private video libraries now can do this without introducing any third-party software, and possible tag along malware and data sharing, into their systems. Those concerned with Digital Rights Management will note that users are not downloading files, merely copying the digital representations that appear via their computers. Naturally these files are just for the personal use of the

Scams

Text scams sent to my phone

Straight Talk: Your plan ends 07/02. To keep your service active, refill your plan now: <https://1.st-w.co/MJ6C...>

Dear **Amazon** user, We have identified some suspicious activity on your Amazon account. In order to ensure the security of your account, we kindly request you to verify your personal information. Please click on the following link: <https://bit.ly/4eNkKkP...>

USPS Notification: Your parcel is temporarily on hold at our facility due to insufficient address information. URL: <https://bit.ly/3W3...>

Fraud Team: 1855946.... Case 3912... Did you attempt \$39.00 at PPPL EU CE USD with card 4338? Reply YES or NO. Opt Out reply STOP.

UNFORTUNATELY, this one is for real. The charge attempt is from Singapore, so I answered NO. So, the bank *deactivated* my card. This process repeated itself for my other bank cards, including a card from an out-of-town bank. What does this mean?

Probably I was scanned by a device that activated the RFID chip in my credit cards. This allowed the thief to access the card numbers and attempt a few purchases. Fortunately for me, my banks were on top of things and sent me text messages.

The remedy, new bank cards and I will start using **RFID & NFC blocking cards in my wallet.**

individual making the copies, since any distribution, especially for commercial purposes, would still be illegal.

Available in Windows 10?

I have come across several articles on the Internet discussing the availability of video recording in the Snipping Tool in Windows 10, but I have personally not found this to be true. I have three computers running Windows 10, and on none of these was I able to load the Snipping Tool with video recording, either from a Windows update or from the Microsoft Store. The new Snipping Tool was introduced as an update to Windows 11, so if video recording is not available on your Windows 11 computer, you might be behind on your system updates.

Using Snipping Tool

The Snipping Tool has a simple-to-use user interface, making it easy for users regardless of their technical knowledge. It is perfect for taking screenshots, creating how-to videos, capturing web presentations, producing instructional presentations, and more. In the following, "Click" means a left mouse click.

Click on the Start Button, then click on All Apps in the upper right-hand corner of that window. All installed applications and programs are listed in alphabetical order. Click on the Snipping Tool icon to launch it.

Click the camera or video icon on the toolbar, then click the New button. You can then select the portion of the screen that you want to capture, then click the Start button on the toolbar. Hit the Pause button to stop the recording, then resume when you are ready. Recording has some built-in start delays so the initiation of the recording will not override anything on the screen you want to record.

By default, the Snipping Tool records sounds from your microphone and the video itself, but it also picks up background sounds from Windows or your other apps. You can disable the audio recording entirely or enable it to record only microphone or system sounds. Also, by default, videos are saved to your system Videos folder. Once a video is created, it can be automatically opened in video editing software for any tweaks you like. The only supported format currently is MP4.

Reprinted from the SUN CITY SUMMERLIN COMPUTER CLUB, 6/24 issue, <https://www.scscclub.com>.

Even if you don't use or like Gmail, you can still use it to filter spam.

Here's one technique that some people use to "pre-filter" their incoming emails. Instead of providing your actual email address when asked, give out a Gmail address that you've created. Configure that Gmail account to simply forward everything to your actual address. Gmail does spam-filtering BEFORE forwarding, so the messages that do get forwarded are virtually spam-free.

Virtual Tours

Son Doong is the world's largest natural cave. Located in Vietnam, it features a subterranean river and the largest cross-section of any cave worldwide. National Geographic's virtual tour lets you explore the cave with full 360-degree views and immersive sounds.

<https://www.nationalgeographic.com/news-features/son-doong-cave/2/>.

Yellowstone offers seven virtual tours appropriate for older elementary and middle school ages. There's a lot of written information along with the images, and *the tours aren't in video*. However, the information is fascinating, and the photos are stunning.

<https://www.nps.gov/yell/learn/photosmultimedia/virtualtours.htm>.

AirPano has a variety of tours in China, Portugal, Switzerland, and more countries. Children can visit the Zhangjiajie Glass Bridge in China, an underwater cave in Indonesia, ski resorts in France, and more destinations around the globe.

What makes this site so good is that it offers narrations of several tours, provides closeups through interactive actions, and includes short chunks of written information that's easy for kids of most ages to read. The tours are also fairly short.

<https://www.airpano.com/>.

My Almost-Perfect Spam Filter

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

Researchers estimate that about 46 percent of all email traffic is spam. But I rarely see any spam in my inbox. That's because my spam filter blocks 99.9 percent of all spam, phishing and malware emails. Read on to learn how you can get near-perfect spam filtering, and declutter your inbox...

Try Blocking Spam With Gmail (it works for any inbox)

According to Statista, a global research firm that provides market and consumer data, [the ratio of legit emails to spam is improving](#). In the beginning of 2011, spam accounted for 80 percent of all emails. Today, that number has decreased by almost half, but that's still not low enough. One factor in that decline is machine learning, an application of artificial intelligence, which has been part of Gmail's spam filter program since its inception.

Every time a user clicks the "Report Spam" or "Not Spam" button on a message, Gmail learns something that helps it filter spam better. But Google is also using AI technology to help Gmail learn on its own, without the user's clicks.

The Gmail spam filter uses an artificial neural network (ANN) that can detect and block the "especially sneaky" spam that sometimes slips past users' radar. What's an "artificial neural network," you ask? The oversimplified answer is, a lot of computers connected to each other in an attempt to simulate the interconnections of human brain cells. It's expensive to build an artificial neural network; most are tiny, with 1 to 10 million connections.

Google has built an ANN with over one billion connections using the processors in its vast and far-flung empire of data centers. That sounds awesome, until you learn that the human brain contains several TRILLION connections! Nonetheless, Google's ANN is capable of rudimentary human-like self-learning. That means you don't have to teach it what spam is, because it's trained to understand the context and nuances of language, making it highly effective at distinguishing spam from legitimate messages.

In one experiment, Google's ANN was fed millions of still images of cats culled from YouTube videos. The images were not labeled as "cats" and programmers did not tell the ANN what a "cat" is. The ANN figured it out for itself, learning to recognize cats in virtually any image. If it can do that, it can recognize spam with greater accuracy than most humans can. In 2019, Google announced that thanks to their machine learning framework, they were able to block an additional 100 million spam messages daily. With recent advances in AI, one might assume that number is higher (especially if the messages have anything to do with cats).

Penguin Platform

By "Free John" Kennedy

UBUNTU'S APP CENTER NOW FINALLY SUPPORTS INSTALLATION OF LOCAL DEB PACKAGES – App Center also lets you update all the snaps using the "Update all" option in the management interface. [Ubuntu's App Center Now Finally Supports Installation of Local DEB Packages – 9to5Linux](#)

LINUX KERNEL 6.9 RELEASED – AND IT'S PACKED WITH IMPROVEMENTS – Linux founder Linus Torvalds announced the final release on the Linux Kernel Mailing List in his usual relaxed, laissez-faire style. He notes that kernel contributors have reported "a few regression fixes that haven't made it to me yet [...] none of them look big or worrisome enough to delay the release for another week. We'll have to backport them when they get resolved and hit upstream." [Linux Kernel 6.9 Released – And It's Packed with Improvements – OMG! Ubuntu \(omgubuntu.co.uk\)](#)

5 LINUX COMMANDS YOU NEED TO KNOW TO TROUBLESHOOT PROBLEMS – Having issues in Linux? These commands can help you get to the bottom of them. [5 Linux commands you need to know to troubleshoot problems | ZDNET](#)

Unidentified Frying Objects?

But the spam-eating technology is still not perfect. Just as humans

You don't have to do anything to use Gmail's spam filtering - it's automatic. But you can add your own filters to funnel messages into folders, forward to another address, and other actions. See my article [\[HOWTO\] Tame Your Overflowing Email Inbox](#) for help adding filters to Gmail, Yahoo, or Outlook.com webmail.

For more spam fighting tips, see my articles [Defend Your Inbox With a Disposable Email Address](#), [How to Trace a Spammy Email](#) and [Report a Spammer? \(Read this FIRST...\)](#)

see UFOs in pictures of streetlights, Gmail's filter sometimes sees spam in legitimate messages and mistakenly consigns them to the spam folder. Google claims that only about 0.01 percent (1 in 10,000) of legitimate emails are falsely labeled as spam these days. As the system learns more about email, that figure should fall even further.

Take a look in your Gmail spam folder, and see how it's working. If you do find certain messages are being

incorrectly flagged as spam, you can create a Gmail filter for them, with a "Never send to Spam" action, so they'll be delivered to your inbox.

On the flip side, occasionally, I do get a batch of spammy messages that recur over a number of days. Recently I was getting several emails daily emails about investing in bitcoin. It was clearly spam, but perhaps because of other tech-related stuff that I do read, Gmail thought otherwise. I created a filter to send them to the Trash, problem solved.

How does Gmail's spam filter compare to other free Webmail services, such as Microsoft's Outlook.com and Yahoo? I haven't been able to find any independent, rigorous studies of this question. I'll just note that Yahoo seems rather overzealous about spam filtering, and quite a few of my outgoing messages to Yahoo accounts end up wrongly labelled as spam, or just don't get delivered at all. If you have any relevant data on this, please do share.

In addition to flagging spam based on the content of the message, Gmail, Yahoo, and other popular webmail services assess the reputation of the sender's IP address and domain name. Emails from known spam sources and messages lacking proper authentication are flagged as potential spam. [Tech note: Techniques such as SPF (Sender Policy Framework), DKIM (DomainKeys Identified Mail), and DMARC (Domain-based Message Authentication) are used to verify the authenticity of the sender. Messages that fail these authentication checks are more likely to be considered spam or phishing attempts.]

Another spam-fighting technique that Gmail employs doesn't really tackle spam, in my opinion. Gmail attempts to learn individual users' reading preferences and filter out even legitimate mail that goes unread. The company gives the example of email newsletters. One user reads them assiduously while another just lets them pile up

*** * Jokes & Quotes Stolen
from Everywhere * ***

Mitch Hedberg:

An escalator can never break: it can only become stairs. You should never see an "Escalator Temporarily Out of Order" sign, just "Escalator Temporarily Stairs. Sorry for the convenience."

I have a king sized bed, I don't know any kings, but if I ever meet one I can tell him "You will not believe what I have in store for you!" "This is made to your exact specifications!" When I was little I used to lay in my twin sized bed at night wondering where my brother was.

I tried to walk into Target, but I missed.

I love my fed-ex guy cause he's a drug dealer and he don't even know it...and he's always on time.

Is a hippopotamus really a hippopotamus or just a really cool opotamus?

My friend asked me if I wanted a frozen banana, I said "no, but I want a regular banana later, so ... yeah".

I used to do drugs. I still do, but I used to, too.

With a stop light, green means 'go' and yellow means 'slow down'. With a banana, however, it is quite the opposite. Yellow means 'go', green means 'whoa, slow down', and red means 'where the heck did you get that banana?'

You know, I'm sick of following my dreams, man. I'm just going to ask where they're going and hook up with 'em later.

unread, or deletes them without reading. Why people don't just unsubscribe from newsletters is one of life's mysteries. Hopefully, Gmail can distinguish between legit opt-in email newsletters and the ones that just arrive without your consent.

Finally, Gmail is providing [help for legitimate, large-volume email publishers](#) whose communications are sometimes wrongly condemned as spam. The Gmail Postmaster Tools will help airlines, banks, credit card companies, and other well-known firms analyze the fate of their emails and improve their delivery and reading rates. That's a good thing, because more and more large companies are encouraging customers to receive their monthly statements by email, rather than paper copies in the mail.

Even if you don't use or like Gmail, you can still use it to filter spam. Here's one technique that some people use to "pre-filter" their incoming emails. Instead of providing your actual email address when asked, give out a Gmail address that you've created. Configure that Gmail account to simply forward everything to your actual address. Gmail does spam-filtering BEFORE forwarding, so the messages that do get forwarded are virtually spam-free.

Gmail's spam filter is so reliable and accurate that I hardly ever check my spam filter for false positives anymore. I get hundreds of emails daily, and I rarely find myself clicking on the "Report Spam" button. The spam filter just works.

Reprinted from

https://askbobrankin.com/my_almostperfect_spam_filter.html.

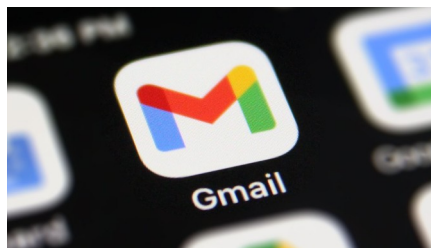
*** * * * * BITS and PIECES in the NEWS * * * * ***

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.

Google Brings its Gemini AI to Gmail to Help You Write and Summarize Emails

[Aisha Malik](#), June 25, 2024

Image Credits: TechCrunch



Google is rolling out a new Gemini AI side panel in Gmail that can help you write emails and summarize email threads. The company is also adding the Gemini side panel to Docs, Sheets, Slides and Drive. The launch of the new features comes shortly after Google [announced](#) them last month at its I/O developer conference, which heavily focused on new AI offerings from the tech giant.

Odds and Ends

These Tiny Vehicles Are Being Driven By Something You'd Never Guess

By [Carly Cassella](#), 14 July 2024

In 1959, the famous theoretical physicist, Richard Feynman, [fantasized](#) about a future in which microrobots swam through our bloodstreams, fixing up our insides or delivering drugs as they go.

Sixty-five years later, scientists are inching closer to that reality.

Engineers at the University of Tokyo have now figured out a way to motorize tiny microscopic structures without the need for an external power source.

The solution? A team of free-moving, single-celled organisms hitched up to a 'chariot' like itty-bitty horses.

One of the problems with 'microbots' designed thus far is that being so tiny, fluids like blood can take on the viscosity of molasses. This makes it harder for the bot to move about, which is why scientists have tried [for years now to create](#) tiny motors powerful enough to propel such structures with greater ease.

Harnessing the swift swimming abilities of the green algae [Chlamydomonas reinhardtii](#), engineers in Japan have come up with a unique solution.

Find out the solution at <https://www.sciencealert.com/these-tiny-vehicles-are-being-driven-by-something-youd-never-guess>.

With the new integration, you can use Gemini in Gmail to get help drafting an email or receive suggested responses to an email. Plus, you can ask questions and find specific information from emails within your inbox or from your Google Drive files.

Google notes that while Gemini in Gmail will provide prompts to help you get started with your queries, you can also ask your own questions. For instance, you can ask Gemini: "What was the PO number for my agency?" Or, you can ask: "How much did the company spend on the last marketing event."

These features are only available to Google Workspace customers with a Gemini Business or Enterprise add-on, a Gemini Education or Education Premium add-on, or a Google One AI Premium subscription.

Google is the latest tech giant to add generative AI features to its popular, everyday apps and services. Earlier this year, Meta [brought its AI chatbot to Instagram](#) and WhatsApp, while Apple recently announced that it's bringing generative AI features to its [apps and services](#), including Siri, Messages, Mail and Notes.

The recent trend of shoving AI into everyday products may not be welcomed by everyone. While there was excitement around Apple's upcoming AI features, there was [pushback](#) when Meta added its AI chatbot to search on Instagram. Until now, users who aren't interested in generative AI tools, like OpenAI's ChatGPT, have been able to avoid them for the most part. But as tech giants continue to add AI to their everyday apps and services, generative AI will be harder to avoid.

This article was found on

<https://techcrunch.com/2024/06/25/google-brings-its-gemini-ai-to-gmail-via-a-sidebar-that-can-help-you-write-and-summarize-emails/>.

China Unveils a New "Artificial Sun" Capable of Generating Plasma

[David Webb](#), 06/27/2024

China has just announced the launch of a new tokamak fusion reactor. Here are their plans.

Facing increased energy demand and growing environmental concerns, **nuclear fusion energy is seen as a promising solution**. Intensive research is ongoing, but until now, no operational fusion reactors have existed.

However, China has just announced **a major breakthrough with its experimental HL-3 reactor**. Following this news, a private company in China aims to commission a new nuclear fusion reactor.

According to Energy Singularity, the HH70 reactor **produced its first plasma** a few days ago, though the temperature reached has not been disclosed, and there's no further independently verifiable information about the reactor.

Energy Singularity's goal is to build a commercially viable tokamak device. The company claims HH70 is already the first operational fusion reactor. Results from HH70 trials will inform its successor, expected to be completed by 2027. **By 2030, Energy Singularity aims to have a fully operational fusion power plant.**

Found on <https://ccm.net/apps-sites/13035-china-unveils-a-new-artificial-sun-capable-of-generating-plasma/>.

MIT's Ultrasound Breakthrough: A New Era in Non-Invasive Brain Healing

By Anne Trafton, Massachusetts Institute of Technology June 30, 2024

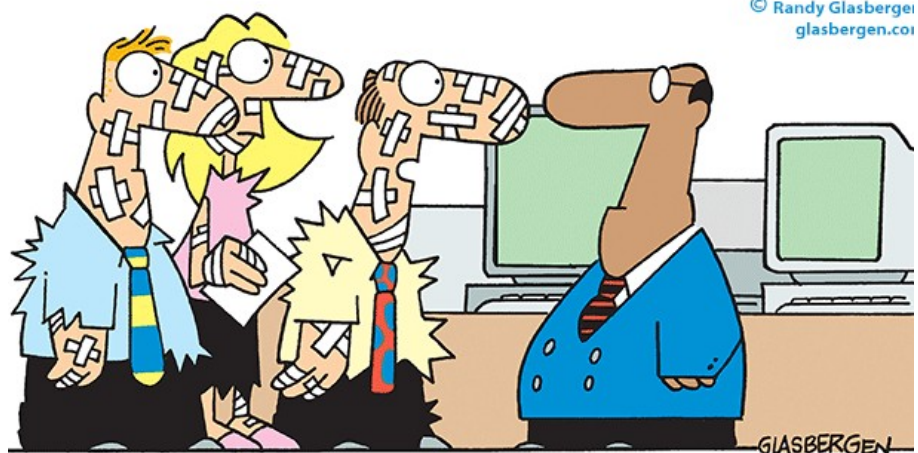
MIT engineers developed a hair-thin ultrasound device that offers a potential breakthrough in treating neurological disorders by providing precise, minimally invasive deep brain stimulation. This technology, known as ImPULS, could replace traditional electrode-based methods, promising reduced tissue damage and increased efficacy.

Deep brain stimulation, by implanted electrodes that deliver electrical pulses to the brain, is often used to treat Parkinson's disease and other neurological disorders. However, the electrodes used for this treatment can eventually corrode and accumulate scar tissue, requiring them to be removed.

MIT researchers have now developed an alternative approach that uses ultrasound instead of electricity to perform deep brain stimulation, delivered by a fiber about the thickness of a human hair. In a study of mice, they showed that this stimulation can trigger neurons to release dopamine, in a part of the brain that is often targeted in patients with Parkinson's disease.

Read the rest of this stimulating article at

<https://scitechdaily.com/mits-ultrasound-breakthrough-a-new-era-in-non-invasive-brain-healing/>.



“Frankly sir, we’re tired of being on the cutting edge of technology.”

CLUB and REGIONAL NEWS

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

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 Schmidtman, 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