



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

## 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.*

7:00 – 7:15, Club Business  
7:15 – 8:30+, Main Presentation  
Come and join in the fun and enjoy a snack! **You are welcome to bring a guest.**

## Become a Member

The club would like to have you as a member, and your subscription will help to keep us going. Go to our website, [www.rcsi.org](http://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.



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**December 13, 'Potluck Video Night',  
members bring a 5 to 10 minute video to show,  
details on last page**

**January 10, 2023, 'Artificial Intelligence  
Trends in 2023', videos by Tony Dellelo**

**February 14, 2023, 'Best of CES' Consumer Electronics**

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## How to Spot Scams, Hoaxes, Urban Legends

By Bob Rankin  
a Translator for the Technology Impaired

**D**id you know? Mister Rogers always wore a long-sleeved sweater to hide the tattoos he got as a Marine Corps sniper. AI-powered robots killed 29 Japanese scientists. And yikes... 40 Mexican hackers have infiltrated your Amazon account! Read on to find out how (and why) nonsense like this spreads like wildfire online.



"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](http://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](http://www.rcsi.org) or my Pcloud storage at <https://tinyurl.com/tonydelrcsi> (*this link works in PDF version only*). Also includes presentation slides, **past newsletters dating back to 1996** and articles too large for this newsletter.

#### **Some Past Presentations:**

The New Space Race, 2021  
Tech of South America  
Autonomous Cars and Robots  
Open Source and Free Software  
Protecting Your Identity  
Tablets, the Programs and Uses  
Personal Finance Software  
Amazing Browser Tips  
Linux is Like Cars  
Drones and Their Many Uses  
Gifts and Gadgets for the Holidays  
Cut the Cord, Streaming Services  
3D Printing, ENABLE project  
Internet Security and Privacy  
Features, Mac OS X & Windows

## **Who You Gonna Call?**

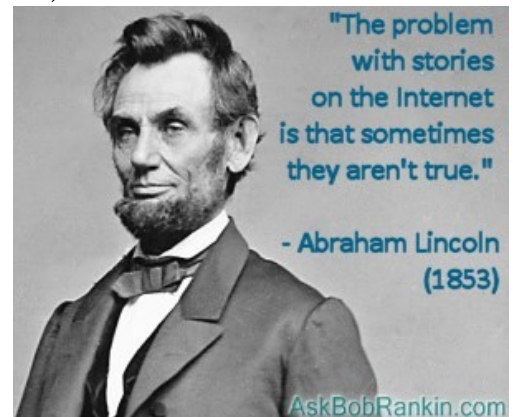
"What... Mr. Rogers wasn't a Marine sniper? Oh, he was a Navy SEAL?" None of these statements is true, of course. They are examples of scams, hoaxes, and urban legends that circulate via email and social media. The Internet is awash with misinformation for a number of reasons.

Some hoaxsters are just having fun, like the originator of Mr. Rogers' false bio. Others are doing it for likes, or upvotes, or other social media "currency" that boosts their online visibility. Have a look back at the [best April Fools Pranks of 2022](#). Some are funny, some are weird, and some are just dumb, like the dating site that puts prospective couples on matching bidets.

There is so much misinformation on the Internet that some people have made careers out of debunking it. Barbara and David Mikkelson launched [Snopes](#) in 1995; today the site gets over 300,000 visitors per day. (Be sure to check the [Hot 50](#) to see some of most intriguing items currently making the online rounds.)

Every time I mention Snopes, some readers comment about a perceived liberal bias there. I don't know if that's true, but it's good to have options. [Scambusters](#) is another site that has tackled messages that can cost you money, such as "miracle cures," "insider stock tips," and even "virtual kidnappings."

The Washington Post's [Caitlin Dewey](#) started her column, "What Was Fake On The Internet" in May, 2014; she gave it up in December, 2015, when science convinced her that people cling to their cherished untruths like barnacles to a ship's hull. Ms. Dewey explains, in her farewell column, that many hoaxes are purposefully perpetrated to drive traffic to hoaxsters' Web sites. The types of hoaxes reveal the mindsets of the people who are most likely to believe and share them.



## **Unintended Consequences...**

One of the most famous cases of a real person's story that morphed into an urban legend involved [Craig Shergold](#). In 1989, Craig was a 10 year old boy hospitalized with a brain tumor. A family friend began a campaign to get him into the Guinness Book of Records for receiving the most postcards, and before long it started spreading by email. Cards began to pour in by the MILLIONS, year after year. Even though Craig was cured in 1991 and his family made public appeals for the cards to stop, their pleas were no match for the power and longevity of the email chain letter. The Craig Shergold chain letter morphed and spawned a wave of bogus "sick child" emails that have caused untold grief to other families who were the targets of pranksters, as well as financial harm to charities such as the Make A Wish Foundation.

The people who forward, repost and retweet these stories without engaging a single brain cell are a marketer's dream. They'll believe

**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>

hosted by Ron Brown  
and Hewie Poplock

Every Monday from 9-10 AM PT,  
(12-1 PM ET)

Broadcast with Zoom

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

###

### APCUG Website Help

Windows & Android Tips:

<https://apcug2.org/jerestips/>

Apple Tech Tips:

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

Penguin Platform (Linux):

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

Chromebook Tips And Tricks:

<https://apcug2.org/chromebook-tips-and-tricks/>

anything that sounds outrageous, tugs on the heartstrings, or confirms their prejudices. And once they find a source of confirmation, they'll keep coming back for more. Needless to say, it isn't hard to sell just about anything to such an audience.

### The Love of Money...

Have you received a text or email claiming that a large purchase was just made on your Amazon account? These messages come with a link to "verify the purchase" or "secure your account" but they are of course scams. Login directly to your Amazon account (if you have one), click to view your recent orders, and you'll see no sign of south-of-the-border hackery.

The "overpayment scam" comes into play when you put an item up for sale online, and the buyer "accidentally" sends you a check for 1000 dollars instead of 10. "Just a simple typo," they claim, and ask you to kindly send them a check for \$990 to refund the overpayment. But by the time you learn that the \$1000 check was bogus, the scammers have already cashed yours. The numbers will vary, but the gist of the scam is the same. Watch out for this type of scam on Craigslist or other online marketplaces where buyers and sellers deal directly.

I regularly get phone calls originating from Jamaica, informing me that I won a multi-million dollar lottery, and a new Mercedes Benz. Of course, there's a fee for shipping, taxes, insurance, and customs processing, so would I kindly provide my banking details? "No thanks," I tell the caller. "I won last month, and I don't have room for another Mercedes in my garage." Click. The tipoff for these calls is the 876 area code, but the bottom line is that you should never send money to claim a prize of any sort.

Scammers are also targeting older folks with phone calls, claiming that their online bank account was hacked. They'll provide instructions to download a program or mobile app to secure the account. Just hang up and call your bank if you have any doubts about the security of your financial accounts.

Of course, there's also money to be made by debunking hoaxes. There are many debunking websites in addition to those mentioned above. [UrbanLegendsOnline.com](http://UrbanLegendsOnline.com), [Factcheck.org](http://Factcheck.org) and dozens more sites promise to set your cranky uncle straight. But the people who believe these stories don't go searching for proof they're wrong, and the rest of us are starting to give up on the believers.

Google has announced a crackdown on fake news websites, cutting them off from the advertising programs that make it profitable for them to continue. Facebook has rolled out tools that make it easier to report hoaxes and fake news. I've long wished that Internet service providers or those who operate webmail services would implement some sort of filter on outgoing or incoming email. Gmail and others warn about potential malware and phishing attempts. Why can't they show a warning when a well-known hoax, fake news story, or urban legend is about to be sent or received?

### [Free Tech Support -- Ask Bob Rankin](#)

Subscribe to AskBobRankin Updates: [Free Newsletter](#)

### END OF ARTICLE ###

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### Planning Meeting

Held on 1<sup>st</sup> Tuesday of each month at 7 pm, \* \* ONLINE \* \*. We will be using [Jitsi Meet](#). ANY CLUB MEMBER MAY ATTEND.

### Got Questions?:

Windows: . . . . . Arpad Kovacs  
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Linux & some Mac: . . . . .  
Carl Schmidtman  
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### 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

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## Most Wished-For New Tech

By Greg Skalka, President  
Under the Computer Hood Use Group

We seem to have so much technology in our lives - how could we want more? But, I'm writing this on President's Day, and I wonder, if George Washington could be transported in time to today, would he be able to cope in our world? Beyond the social and economic changes he would face, would he be able to deal with our technology? Cars, trains, airplanes, radio, TV, cell phones, space travel, nuclear bombs - would he be able to understand any of it, or would he want to hide up in a cherry tree? There is a saying: Any sufficiently advanced technology is indistinguishable from magic.

If we were able to bring Abe Lincoln to the present day, would he be any better able to understand our world? He would have at least some familiarity with trains and some industrial technology. Since he used the telegraph, he may be better able to cope with our communications tech today. What if we could bring Albert Einstein (who died in 1955) to the present? Would he be astounded by the capabilities of a smartphone?

What new technology would you most like to see introduced this year? This was a question a web app asked my friend's wife. Because she currently has two retirement homes, one in Idaho and one in Arizona, she said what she wanted most was a transporter.

No matter how much tech we have, we still have science fiction, which can drive our desires for more and direct our innovation. For example, everyone has seen Star Trek and its transporter device, a means to "beam" people and materials from one place to another in almost an instant. My friend and his wife have traveled between their homes many times in the last year, so it was understandable that she would like a way to make that trip more quickly.

The Star Trek transporter is generally portrayed as a circular pad connected to a device or console on the floor. A person on the pad is scanned atomically and then de-materialized, with the data representing their physical manifestation sent to a remote location and re-materialized. Matter, to energy, and back to matter. That seems like it could be in the realm of science and not magic, at least for non-living things. If we can have a 3D printer today using elemental materials, who is to say we couldn't one day print in atomic particles, creating atoms and molecules of any kind?

That is likely the science behind the Star Trek replicator, the cousin of the transporter. It can create inanimate objects of great complexity from a data file, with energy as the only apparent input. From "tea, Earl Grey, hot" to complex parts, the replicator could help feed our world and solve many problems, as long as you could solve the problem of where to plug it in. Of course, Star Trek tech would have to include a powerful green power source like a fusion reactor.

We are starting to take some steps toward the food replicator concept. For example, I've read about a company trying to "grow" animal tissue that can be 3D printed into burgers or steaks. This would provide "cruelty-free" meat that perhaps requires fewer resources than our current agricultural methods.

## Tidbits of probably useless information

One of the earliest uses—perhaps the earliest use—of "**OMG**" appeared in a letter to the then-member of Parliament, as *The Atlantic* reports. In 1917, British Navy Admiral **John Arbuthnot Fisher** wrote to **Winston Churchill** about rumors of new titles that would soon be bestowed. "I hear that a new order of Knighthood is on the tapis," he wrote. "[O.M.G. \(Oh! My God!\)](#)—Shower it on the Admiralty!"

Some cats are actually allergic to humans. Though it's uncommon—since humans bathe more than your typical animal, and don't shed as much hair or skin—some [animals can still be allergic to humans](#), according to *Popular Science*. (However, it's more often because of the perfume or cologne we wear, or the soap we use.)

The majority of your brain is fat. You can literally call someone a fathead, but it's still unkind: According to *Psychology Today*, [60 percent of human brain matter is made of fat](#).

Oranges aren't naturally occurring fruits. Oranges may be an iconic fruit, but they are not a naturally occurring one, as *The Telegraph* points out. In fact, [oranges are a hybrid of tangerines and pomelos](#), also known as "Chinese grapefruit," and they were originally green—not, well, orange. Oranges are a subtropical fruit, but now that they exist in more temperate climates, they lose their chlorophyll-induced green and become their more familiar color when the weather warms up.

The Star Trek replicator only made food and parts; it seemed incapable of creating a living object, making it more plausible. Many people, myself included, have concerns about the apparent "destroy, then re-create" operation of the transporter in Star Trek. There were a few episodes in which a character's information was trapped in the device's "pattern buffer" (presumably memory) for years or decades before someone found a way to re-materialize them. In one episode, a transporter malfunction created a second instance of a character. This would have obvious religious implications in the real world, but apparently not in Star Trek.

My preference for quick and distant travel would be by stargate, from the movie "Stargate" and its derivative TV series. In this sci-fi franchise, stargates are devices created by ancient aliens that can connect with a wormhole (a "tunnel" through spacetime). Anything passing into a connected stargate instantly passes through the wormhole and out the stargate at the other end. These seem more supported by science than transporters; now, we need to find those aliens to show us how to build them. Perhaps those aliens in the movie "Contact" could help. If only they'd send us the plans.

My favorite "wish-for" tech device is something I've not specifically seen in any science fiction: the temporal cakebox. My concoction solves one of my most vexing problems: how to fully enjoy my favorite food - chocolate cake. We live in a time of food plenty, with a nice chocolate cake available at Costco for a good price. I'm too thrifty to want to pay for cake by the slice, but I can't (and should not) consume a whole cake in the time before it degrades. So what I need is a temporal cakebox.

I envision the temporal cakebox as a device similar to a large microwave oven. When you buy a cake, you would take a slice, put the remaining cake in the temporal cakebox, close the door and activate it by pressing the Reset button. Later (hopefully at least a day or two), you can return to the temporal cakebox and press the Return button. This would return the inside of the device to the time when you last pressed the Reset button. Then, you could open the cakebox door, remove another slice (just as fresh as when you put the cake in), close the door, and press Reset again. This sequence can be repeated over any timeframe until the cake is gone, with the last slice just as good as the first. Since I'm not violating any laws on the conservation of matter (I'm not creating any cake, just doling it out over spacetime) or making any time travel paradoxes (no cake is going back in time to kill my grandfather), I don't see why the temporal cakebox can't work.

The stereotypically expected technology always involves a flying car. Don't you remember thinking as a child that we would have flying cars by the 21st century? We are almost a quarter of the way through it, and still no flying cars. I can't see that we could have flying cars for the masses unless they were self-flying. Since we can't seem to perfect self-driving in two dimensions, flying cars seem like a long way off.

Another slightly related tech item is the personal jetpack. Those appear to be available (as well as wingsuits), though they are relatively expensive, in the \$250k to \$500k range. Finally, the personal drone is affordable, though I've yet to see any Amazon delivery drones in my neighborhood.

## Windows & Android Tips

Judy Taylour

### HOW TO LINK AND SYNC YOUR ANDROID PHONE

**WITH WINDOWS 11** – By linking your Android phone, you can intercept phones calls, text messages, and more on your Windows PC. Learn how here [How to link and sync your Android phone with Windows 11 | ZDNet](#)

### HACKERS WANT GOOGLE ACCOUNTS. GIVE YOURS THIS SECURITY CHECK NOW!

– Your Google account is one of the most important things on your devices, especially if you're a Gmail user. Here's a simple way to ensure yours doesn't end up in the wrong hands. [Hackers want Google accounts. Give yours this security check now! \(komando.com\)](#)

### HOW TO REMOVE ADWARE ON AN ANDROID PHONE

– It shouldn't be surprising that Android devices are the targets of threats like adware and other Potentially Unwanted Programs (PUPs). After all, there are millions of apps on the Google Play Store, servicing billions of monthly active users globally. And, as we have noted with Mac virus trends, platforms with rising popularity tend to attract threats. Read more at [How to remove adware on an Android phone | Malwarebytes Labs](#)

### WHAT IS FLASH STORAGE?

– If you've been shopping for an SSD or using memory cards for cameras, you'll probably encounter the term "flash memory." But what is flash memory and how does it work? We'll explain. [What Is Flash Storage? \(howtogeek.com\)](#)

AI, or artificial intelligence, is being worked on today. It may one day drive our cars, fly our planes, find a solution for global warming or rule us as a benevolent overlord. Right now, all an AI can do is win at Jeopardy and predict what we will buy next. It has been eleven years since the IBM Watson computer beat Ken Jennings on Jeopardy; what has it been doing since then? At least Watson is not trying to invade Ukraine. Or is it? [See the article "Watson Sold Off for Parts" at <https://slate.com/technology/2022/01/ibm-watson-health-failure-artificial-intelligence.htmeditor>.]

If AI could be made safe and effective, one good use for it would be as a robot helper. Having a few droids around the house to help out would be great. Oh, wait! My wife has a Roomba robot vacuum, though she hardly uses it. So, I guess it is no R2-D2 or C-3PO.

From the newsletter of the [www.uchug.org](http://www.uchug.org), [president@uchug.org](mailto:president@uchug.org).

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

## Are Free Public Phone Charging Stations Safe?

'Juice Jacking' Might Load Malware on Your Phone or Tablet as It's Charging

by Kurt Jefferson, Editor  
Central Kentucky Computer Society

You're on a layover at a major airport when you realize your iPhone



or Android smartphone's battery is draining fast, and the battery power is down to single digits. The battery icon has just turned from green to red, meaning your phone is nearly drained. Soon it will be as useless as an electric kettle in a cave.

There's a convenient public charging station nearby. You're in a bind. Your jet leaves in half hour. And yet you've read about the dangers of charging your phone or tablet at a public charging station. So what's a person to do?

How can you be sure the public charging station is safe? Reviewed.com reports, "As the latest security alerts prove, USB cables and chargers are like chewing gum—if you find it lying around in public, don't use it. It's not free candy. The Los Angeles District Attorney recently warned that charging your phone via those public USB ports can lead to "juice jacking." That's when hackers use the connection to transmit dangerous malware onto your device and steal your personal information or data."

Reviewed.com's executive editor, T.J. Donegan, recommends an alternative. He recommends you buy a USB portable battery pack, "many of which can even charge laptops on the go—so you don't have to crowd around the one outlet with 15 other people."

Reviewed.com recommends what's called the Jackery Bolt portable battery pack. It says the portable battery pack "has an incredibly high capacity that can charge your phone three times over (!!) before the charger needs to be recharged. Plus, it's slim and compact, so it's easy to

## Interesting Internet Finds

By Steve Costello  
[scostello@sefcug.com](mailto:scostello@sefcug.com)

### ***I Lost My Phone With My Second Factor For Authentication. How Do I Recover?***

<https://askleo.com/i-lost-my-phone-with-my-second-factor-for-authentication-how-do-i-recover/>

I know some people are hesitant to use two factor authentication for this reason. Leo explains how he would recover from that scenario. (Note: I use 2FA everywhere I can, and have not had a problem. The key is to think about how to handle this and prepare for it before it ever happens.

### ***Gas Prices In Google Maps: Here's How To Find Them***

<https://9to5google.com/2022/05/13/how-to-find-gas-prices-with-google-maps/>

With the price of gas on the rise, it is even more useful to be able to find the best price. This post shows how to find gas prices while using Google Maps. (Note: This knowledge came in handy during a recent road trip. Prices differed by over twenty cents a gallon within a hundred miles during the trip. Without being able to see the prices in Google Maps, I would have almost surely spent a lot more for gas.)

tote around and has multiple ports so you can charge more than one device at a time." Amazon currently sells the Jackery Bolt for \$32.99.

The Wirecutter, a website that reviews and tests nearly everything (and purchased by The New York Times), gives high marks to the Zendure SuperMini 20w Power Bank. Amazon currently sells this model for \$45 (using the Amazon on-page clipped coupon). The Wirecutter writes in its Zendure review, "about as small and lightweight as a power bank can be while still offering enough capacity to juice up most smartphones up to three times. Its USB-C Power Delivery (PD) port can charge most handheld devices (and recharge the power bank itself) at top speed with the included USB-C cable and a compatible wall charger (the one that came with your phone will work). The USB-A port can handle any older, non-USB-C devices you might have kicking around, too."

The HyperJuice 18W USB-C+ Lightning Battery Pack also gets a good Wirecutter review. It contains built-in cables, so you don't have to mess with cables that can easily get lost, tangled, or misplaced. It's currently \$60 from the Hyper website.

The Wirecutter also gives thumbs up to the TravelCard Charger, which sells for \$30 from TravelCard. "It has the lowest capacity of any power bank we've tested," writes The Wirecutter, but the review claims it's the best portable charger "for someone who wants to have an emergency boost of power always on hand."

Reviewed.com:

Here's Why You Should Never Use A Public Phone Charger

The Wirecutter:

The Best Portable Chargers and Power Banks for Phones and Tablets

### **FBI Issues Warning Over Public Charging Stations**

The FBI says don't do it even if you're tempted to use a public charging station so your phone or tablet won't die on you. It's a risky business, according to the team at the FBI, watching malware spread on mobile devices throughout the U.S. and abroad:

"Cybersecurity experts have warned that criminals can load malware onto public USB charging stations to maliciously access electronic devices while being charged. Malware installed through a dirty USB port can lock a device or export personal data and passwords directly to the perpetrator. Criminals can use that information to access online accounts or sell it to other bad actors."

FBI tech experts add, "Don't let a free USB charge wind up draining your bank account." Here are some tips to help you avoid becoming a juice-jacking victim:

- Avoid using a USB charging station. Use an AC power outlet instead.
- Bring AC, car chargers, and USB cables with you when traveling.
- Carry a portable charger or external battery.
- Consider carrying a charging-only cable from a trusted supplier, which prevents data from sending or receiving while charging.

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## Virtual Tours

### NASA at Home -- Virtual Tours and Apps

NASA is exploring our solar system and beyond, uncovering worlds, stars and cosmic mysteries near and far with our powerful fleet of space and ground-based missions.

Explore our facilities. View our laboratories. Enter our operations control centers.

We invite you to tour NASA virtually from the comfort of your home or convenience of your mobile device.

### **Featured Tours**

#### **NASA's Goddard Space Flight Center Virtual Tour** -

NASA's Goddard Space Flight Center in Greenbelt, Maryland, is home to the nation's largest organization of scientists, engineers and technologists who build spacecraft, instruments and new technology to study Earth, the Sun, our solar system and the universe.

#### **Artemis**

**RS-25 Rocket Engine Testing** - NASA's Stennis Space Center in Mississippi conducted a series of RS-25 rocket engine hot fire tests for NASA's Space Launch System, which is being built for missions beyond low-Earth orbit that will carry crew and cargo to the Moon and destinations beyond.

#### **International Space Station**

**Commercial Crew Program 360-Degree Virtual Reality Tour** - works with commercial partners to launch astronauts to the International Space Station from U.S. soil on American-built rockets and spacecraft. These immersive videos share the story of groundbreaking innovation borne of this government-industry partnership.

## 5 Things Driving Interest in EVs

BrandPoint

If you think you've been seeing more plug-in cars on the road or hybrid vehicles in the carpool lane lately, you are not imagining it. A recent Deloitte report found that high fuel prices, combined with lower maintenance costs, has EV interest poised for continued growth among U.S. consumers.

Hankook Tire's latest Gauge Index took a closer look at what's driving interest in EV and hybrid vehicles:

### 1. Gas prices play a big part.

Perhaps it is the obvious answer, but the high prices at the pump are among the biggest incentives for those looking to make the switch from a traditional gas-powered or internal combustion engine (ICE) vehicle to a hybrid or EV. According to the Gauge, most Americans (51%) find spending less money on gas as the most appealing benefit of EVs.

### 2. Environmental concerns are rising.

Other drivers are more environmentally minded in their decisions: nearly a quarter (24%) say the environmental impact of an EV is the most appealing reason for them to switch. According to the EPA, electric vehicles typically have a smaller carbon footprint than gasoline cars, even when accounting for the electricity required to charge them.

### 3. EVs can go the distance.

Technology advancements have given EVs a leg up when it comes to distance - though many drivers (51%) still underestimate how far one can travel on a full charge. On average, an EV can go about 250 miles on a single charge. And considering the average household travels approximately 50 miles on a typical day, according to the Federal Highway Administration's latest National Household Travel Survey, that makes EVs a strong option for most.

### 4. Maintenance matters for many.

There are specific maintenance considerations for EVs, but the benefit for many is that maintenance typically costs less than for an ICE vehicle - up to 30% lower!

However, Hankook found that many drivers will need to brush up on what those particular maintenance considerations are before they make the switch - only 29% know that EVs have different maintenance requirements to their gas-powered counterparts. Similarly, only 22% of drivers know that if you are aiming for optimum performance, EVs should use tires designed specifically for EVs. (On the bright side, 82% are aware that there is a difference between a hybrid and an EV.)

### 5. EVs offer plenty of options.

The growing popularity of EVs also leads to growing options - whether you prefer to drive a sedan, coupe, SUV or light truck, there's an EV option for you. The EPA notes that there are currently more than 50 plug-in hybrid and electric vehicle models on the market, with vehicle



## Unusual Product

[QuickChargePro](#) - If Your Phone Gets Hot While Charging, Dump Your Charger (And Get This Immediately)



If your phone gets hot while charging, I have bad news for you: Your charger is likely releasing an uncontrolled surge of electricity into your smartphone, causing it to fry from the inside out.

At best, this can drain your battery's health. And at worst, it could "blow up" and stop working forever.

Why does that happen though? Well, tech giants dump billions into the development of the latest phones, but seem to ignore the chargers.

So if you don't want to use a charger that slowly (or sometimes quickly) destroys your phone from the inside, you have to get QuickChargePro.

This new Silicon Valley startup has developed a new type of charger that simultaneously charges 4 separate devices up to 4x faster - all from one outlet!

Its "Smart Integrated Circuit (IT)-Technology" *protects your devices from overheating, overcharging, extreme voltage, or short circuiting.*

So if you value your phone's health, [it's time to make the upgrade](#) (and ditch the factory charger for good).

1x QuickChargePro USB

Orig Price: \$76

Only \$38 +\$7.95 S&H

Total: \$45.95

class options likely to continue expanding in coming years. So for those seeking alternate options, there are plenty to go with!

And here's a fun fact for those considering a personalized license plate for their EV - Hankook found the two most popular vanity plates for EVs are CHARGEME (26%) and OUTOFGAS (24%).

With all of the benefits that EVs and hybrids offer for those seeking to lower costs and their overall environmental footprint, it's no wonder that the Gauge found 60% of drivers either currently own or lease a hybrid or EV, or plan to in the future.

Reprinted from the website

<https://www.brandpointcontent.com/article/40023/5-things-driving-interest-in-evs>.

\* \* \* \* \* 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.

## Fighting Tumours with Magnetic Bacteria

By ETH Zurich, Switzerland

Researchers at ETH Zurich are planning to use magnetic bacteria to fight cancerous tumours. They have now found a way for these microorganisms to effectively cross blood vessel walls and subsequently colonise a tumour.

Scientists around the world are researching how anti-cancer drugs can most efficiently reach the tumours they target. One possibility is to use modified bacteria as "ferries" to carry the drugs through the bloodstream to the tumours. Researchers at ETH Zurich have now succeeded in controlling certain bacteria so that they can effectively cross the blood vessel wall and infiltrate tumour tissue.

Led by Simone Schürle, Professor of Responsive Biomedical Systems, the ETH Zurich researchers chose to work with bacteria that are naturally magnetic due to iron oxide particles they contain. These bacteria of the genus *Magnetospirillum* respond to magnetic fields and can be controlled by magnets from outside the body; for more on this, see an [earlier article](#) in ETH News.

### Exploiting temporary gaps

In cell cultures and in mice, Schürle and her team have now shown that a rotating magnetic field applied at the tumour improves the bacteria's ability to cross the vascular wall near the cancerous growth. At the vascular wall, the rotating magnetic field propels the bacteria forward in a circular motion.

To better understand how the mechanism to cross the vessel wall works, a detailed look is necessary: The blood vessel wall consists of a layer of cells and serves as a barrier between the bloodstream and the tumour tissue, which is permeated by many small blood vessels. Narrow spaces between these cells allow certain molecules to pass through the

## \* \* Jokes Stolen from Everywhere \* \*

I think my neighbor is stalking me as she's been Googling my name on her computer. I saw it through my telescope last night.

My email password has been hacked. That's the third time I've had to rename my cat.

Maybe if we start telling people the brain is an app they will start using it.

A computer once beat me at chess, but it was no match for me at kick boxing.

Entered what I ate today into my new fitness app and it just sent an ambulance to my house.

A clean house is the sign of a broken computer.

The first computer dates back to Adam and Eve. It was an Apple with limited memory, just one byte. And then everything crashed.

Moses had the first tablet that could connect to the cloud.

I changed my password to "incorrect". So whenever I forget what it is the computer will say "Your password is incorrect".

My mom said that if I don't get off my computer and do my homework she'll slam my head on the keyboard, but I think she's jokinfjreoiwjrtwe4to8rkljreun8f4ny84c8y4t58lym4wthylmhawt4myl4t4amlathn....

vessel wall. How large these intercellular spaces are is regulated by the cells of the vessel wall, and they can be temporarily wide enough to allow even bacteria to pass through the vessel wall.

Continue reading at <https://ethz.ch/en/news-and-events/eth-news/news/2022/10/fighting-tumours-with-magnetic-bacteria.html>.

## "Forever Chemicals" Present in Drinking Water May Be Removed With Filtration Methods

By Michelle Codiva

A group of engineers from Johns Hopkins University has developed a technique to remove a class of hazardous industrial "forever chemicals" that are frequently detected in drinking water.

### Per- and Polyfluoroalkyl Substances

Per- and polyfluoroalkyl substances, also known as PFAS, are a class of synthetic organic contaminants used in a wide range of industrial processes and consumer goods, such as non-stick cookware coatings, food wrappers, water-resistant clothing, and textiles for furniture. They are known as forever chemicals because they last thousands of years.

PFAS leak into water systems when these materials are used, disposed, or incorrectly dumped. Once there, they have peculiar chemical characteristics that are brought about by some of the strongest carbon-fluorine interactions in chemistry, making them very challenging to deal with.

The immune system, hormones, and the efficacy of immunizations can all be negatively impacted by long-term, low-concentration exposure to PFAS. Additionally, it may result in excessive cholesterol and low birth weight. High levels of PFAS exposure at work or living close to a dumping site raise the risk of thyroid disease, kidney cancer, liver damage, and testicular cancer.

### Granular Activated Carbon vs Anion Exchange Resins

According to the Hub, to get rid of PFAS, the researchers contrasted two of the most effective categories of separating media: granular activated carbon and anion exchange resins. For 15 months, they methodically assessed how well each of them removed various PFAS in prototype municipal water treatment plants. They came to the conclusion that the resins were more efficient at getting rid of the majority of the PFAS examined.

The treatments can be compared to large-scale equivalents of the filters people use at home to clean their own drinking water, according to Steven Chow, research associate in the Department of Environmental Health and Engineering at Johns Hopkins and the study's first author.

Read about this disturbing problem at <https://www.sciencetimes.com/articles/40713/20221026/forever-chemicals-present-drinking-water-removed-filtration-methods.htm>.

## Odds and Ends

In Global Race for STEM Leadership, Private Investment is Necessary for the U.S. to Win



As America races to accelerate innovation across science, technology, engineering, and mathematics (STEM), public and private sector investments are essential to advancing new technologies. The bipartisan CHIPS and Science Act of 2022 represents a solid step forward in the country's path to investing smartly in STEM education and programming. Notably, the act allocates investments in STEM at K-12, community college, undergraduate, and graduate levels. It's one way to ensure that more people from all backgrounds, regions, and communities around the country gain access to STEM education and training opportunities.

However, the responsibility to expand access to STEM resources does not rest solely on the government's shoulders. Commercial and private institutions, as well as individuals (especially teachers and parents), continue to shore up the country's competitiveness by working to educate and inspire future generations to explore STEM careers. And good thing, because STEM occupations are projected to grow at twice the rate of all other occupations in the next decade.

[\[www.brandpointcontent.com\]](http://www.brandpointcontent.com)

## A New Law Designed for Children's Internet Safety Will Change the Web for Adults, Too

The bill requires fundamental changes to platform design and personalization settings.

By Shana Lynch

In September, California Governor Gavin Newsom signed [AB-2273](#), the California Age Appropriate Design Code Act (Cal-AADC), into law. The bill, designed to protect minors on the Internet, goes beyond today's simple parental controls. It requires fundamental changes in the design of platforms that protect children's online privacy while also mitigating harms such as bullying, exploitation, and inappropriate content.

The law requires new default settings for children, tools for managing privacy preferences, impact assessments before new products are released, and adjustments to behavior manipulations designed to keep children using a product.

While directed toward children's safety and well-being, the impact of the law could be much broader, says Stanford HAI Privacy and Data Policy Fellow [Jennifer King](#). "This is focused on kids, but this is coming for adult audiences, too," she says. "What we're seeing is a shift toward a world where you get more choices over what and how you want things given to you that isn't simply the company's version of personalization."

In this conversation, she explains the implications of the new law, how it will impact AI developers, and what happens next in the U.S. privacy and AI regulatory landscape.

### What will this new law actually do?

This law shifts the baseline of defaults. It's a feature of [privacy by design](#). It's similar to how Apple has implemented ad tracking transparency, where you now have to opt in to tracking within mobile apps, rather than opting out. Over 75 percent of Apple customers say no when asked whether they want to be tracked. This law is similar, although the baseline is not whether you are being asked if you want to be tracked — you're just not being tracked. This new default will be for children under the age of 18 but could apply to any user of a website if the operator decides that offering that option is simpler than identifying the children who visit their website.

### Does this mostly only impact big tech companies?

Generally, yes, unless your personal website directs content at children, or you know that a substantial number of your visitors are under the age of 18. I think EdTech [educational technology] sites and products will be impacted.

A UK version of this law already exists, so I think that's one reason why we haven't seen much public pushback from the big platforms in the runup to the bill's passage. The Googles and Metas have already had to comply with the UK Children's Code for a year now. But for some businesses that are U.S.-focused, the Cal-AADC will be entirely new.

Check out the regulation at <https://hai.stanford.edu/news/new-law-designed-childrens-internet-safety-will-change-web-adults-too>.

## Robot Teaches Tai Chi

by Scarlett Evans, 7th October 2022

The new system is intended for use at senior and community centers.

The rise of automation has led to assistive robots being deployed in a number of (sometimes surprising) contexts, with researchers developing robots that act as anything from medical assistants and companions to warehouse workers and security guards. Now, a team of engineers from the Rochester Institute of Technology (RIT) have announced a robotic system that can teach Tai Chi.

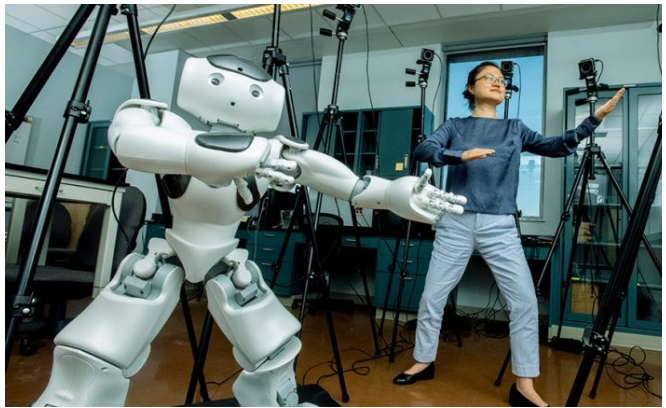
The new design comes from RIT's Intelligent Interaction Research Lab, which was initially established to develop tech-driven therapies for seniors with chronic conditions and use AI and robotics to improve mental health care.

The new system is intended for use at senior and community centers. Researchers selected Tai Chi for its physical and mental benefits, known to help improve the cognitive function of those participating in the class.

The robot, designed by NAO, was taught Tai Chi by the team through motion-tracking cameras and was also programmed to instruct class participants in the meditative breath work associated with the exercise.

While the Tai Chi robot has not yet been deployed commercially, Zheng and her team hope it will soon lead classes at a local community center.

Continue at <https://www.iotworldtoday.com/2022/10/07/robot-teaches-tai-chi/>.



## RCSI

The club is having it's first 'Pot Luck' video night. Just like pot luck dinners, where everyone brings a dish to pass around, each member can bring a 5 to 10 minute video to show. You do not need to explain the video, but just show something that interests you. *The video does not have to be technology or computer related.* This could be an eye opening night, since each person has different interests and backgrounds. This event will take place at our December 13<sup>th</sup> meeting. **Your video can be put on a flash drive or emailed to me at [tonydel@techie.com](mailto:tonydel@techie.com).**

Bob Gosticha's presentation to our club 'Cyber-Safety in the Digital Age', has been uploaded to my Pcloud storage at <https://tinyurl.com/tonydel-rcsi>.

**New Meeting Place**  
Our Usual Meeting Place is being renovated.  
**St John's Meadows** at Johnsarbor Drive, is on the left, past Clinton Avenue, when going West on Elmwood Avenue. The opening in the white fence is Johnsarbor Drive. At the 'T', turn right. The meeting is in the SECOND building on the left – **Chestnut Court.**  
Our meeting place can change. Please check our website before each meeting. **www.rcsi.org**

**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](mailto:podcomputer@gmail.com)  
Linux & some Mac: Carl Schmidtman, [unixgeek@faultline.com](mailto:unixgeek@faultline.com)