



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 – 7:15, Club Business

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

Become a Member

The club would like to have you as a member, and your subscription will help to keep us going. Go to our website, www.rcsi.org, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

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



Vol. 43, No.4 web: www.rcsi.org Rochester, NY April, 2024

April 9, 'AI in Healthcare',

'Computer Automation History'

May 14, 'Alternative Energy Sources',

'Personal Home Robots'

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The Future of AI: Exciting Times, Big Questions

by Samuel Ouma Othieno, Febtuary 4, 2024

Imagine a world where computers can predict your health, translate languages instantly, and even drive you around town! That's not science fiction anymore, it's the exciting future of Artificial Intelligence (AI). But with its amazing possibilities come big questions and challenges. Let's explore some of the coolest things AI is doing and think about how we can make sure it benefits everyone.

Learning Machines on the Rise!

The heart of AI is machine learning, where computers get smarter by crunching through tons of information. Think of it like a child



“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

learning by seeing and doing. This amazing ability lets AI do incredible things:

Doctors are like detectives: AI can analyze your medical data, like X-rays, and find hidden clues to illnesses even before you show symptoms. This means doctors can catch problems early and give you the best treatment possible!

Investing made easy: Imagine being able to peek into the future of the stock market! AI can analyze mountains of financial data and suggest where to put your money, making investing almost as simple as buying groceries.

Traffic jams no more: Self-driving cars are being tested right now, and they use AI to see the road, follow rules, and even avoid accidents. This could mean smoother commutes and fewer crashes in the future!

Talking to machines, seeing with tech:

Computers are learning to understand us! Natural Language Processing (NLP) helps them speak our language, so we can chat with them like friends. This could mean seamless translations in real-time, breaking down language barriers and bringing people together.

And AI doesn't just listen, it sees too! Computer vision gives machines eyes, letting them "see" the world. This is used for amazing things like:

Super-smart security: AI cameras can spot suspicious activity and keep us safe. Imagine them automatically alerting the police about a robbery in progress!

Helping doctors heal: AI can analyze medical images like MRIs and X-rays, helping doctors diagnose diseases faster and more accurately. This could mean quicker treatment and better outcomes for patients!

Robots become factory workers: Imagine robots working in factories, building things with perfect precision and never getting tired! This could make production faster and more efficient.

Ethical questions for smart machines:

As AI becomes more powerful, we need to think carefully about how to use it. Important questions include:

Will everyone benefit? We need to make sure AI doesn't just help the rich and powerful, but everyone in society.

Who's in control? Humans must always control AI, not the other way around.

What happens to jobs? As AI takes over some tasks, we need to find new ways for people to work and earn a living.

Finding the answers to these questions won't be easy, but by working together, we can make sure AI's future is bright, fair, and beneficial for everyone.

Want to learn more?

How can AI help fight inequality and make the world fairer?

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):

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Chromebook Tips And Tricks:

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

What skills will we need in a world full of AI?

Can AI help us be more creative?

How can we build trust with AI and make sure it understands us?

These are just a few of the exciting questions we'll be exploring as we journey into the future of AI. Let's embrace its potential while making sure it benefits everyone because together, we can create a world where technology makes our lives better, not just different.

Found on <https://articlebiz.com/article/1052214707-the-future-of-ai-exciting-times-big-questions>.

Editor's note: The following article is good, but also an ad.

Small Business Growth Made Easy With AI

by GoDaddy at Brandpoint, 3/2024

If your small business doesn't have an online presence, you're getting in the way of your own success. According to a new survey by small business services platform GoDaddy, 89% of consumers say it is important for a small business to have a website, yet nearly a quarter of small businesses (24%) don't.

Maybe you've considered building a website or creating social media accounts for your small business, but lack the time or experience to do so. It's not surprising. Venture Forward, a small business research initiative, surveyed 6,000 entrepreneurs in the U.S. and U.K. and found that 42% of them cite difficulty marketing their businesses as a top challenge.

Artificial intelligence, however, is changing the game for small businesses. Emerging generative AI tools can instantly and inexpensively provide customized help to small businesses. GoDaddy survey respondents indicated they believe AI can save them more than \$4,000 and 300 hours of work per year.

Here's how generative AI can help you create, build and grow your business's online presence, even with limited tech skills and tight time constraints.

1. Create your brand

Whether starting a business from scratch or taking your brick-and-mortar business online, you'll need some help creating your digital identity. For example, you may have a business name but no clue how to turn that into a memorable domain name. AI can help you get started on that journey instantly.

Even if you only have an inkling of an idea, a solution like GoDaddy Airo™ can recommend catchy domain names with just a quick description of your business. This may seem like a small step, but once you have a domain that resonates with your vision, all you have to do is register it, and your small business has officially gone digital.

2. Build your online presence

Now that you're online, it's time to build your business's presence. Plenty of platforms offer to do the heavy lifting when it comes to building a website. However, you'll still need to design graphics and

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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

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draft content to populate your site, taking more time away from running your business. Plus, that work doesn't come naturally to everyone.

Instead of contracting with someone to develop your website, AI can be your web creator. AI solutions go as far as generating a fully built website with imagery and content to help you engage current and potential customers. From creating logos to professional email accounts to auto-generated product descriptions, there's a lot you can do with AI - even register your business as an LLC.

3. Grow your customer base

Once you've established your website, it's time to turn your attention to growing your business by capturing new customers. In the modern world, that means expanding the places your business shows up online. This is not a one-and-done task. It takes continuous - weekly if not daily - attention.

Instead of taking on these tasks yourself, use AI to build email campaigns, a social media calendar and low-cost ads to draw traffic to your website. These simple activities are essential to the longevity of your business.

Are you ready to let AI work for you? GoDaddy Airo™ makes leveraging the power of AI easy for anyone wanting to start a business or take their existing one to the next level. Visit [GoDaddy.com/ai](https://www.brandpointcontent.com/article/42828/small-business-growth-made-easy-with-ai) to see everything generative AI can do for you.

<https://www.brandpointcontent.com/article/42828/small-business-growth-made-easy-with-ai>.

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From the <https://askleo.com/> website.

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

SPEED] Is Satellite Internet Getting Faster?

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

If you live in a rural area, your Internet access options are limited. DSL, cable and fiber internet service are not available in many thinly-populated areas. Forget about 5G and even 4G cellular access. For many rural residents, Internet access boils down to a choice between miserably slow dial-up and slightly better satellite Internet access. The latter option is showing greater promise, though. Read on to learn about the pros and cons of satellite internet service...

How Does Satellite Internet Service Work?

Satellite Internet is a wireless communications technology. At the user's end, a satellite modem is connected to a dish antenna. Signals

Tidbits of probably useless information

There is only one even prime number. The number 2 is also the smallest and first prime number (since every other even number is divisible by two).

The square root of two is called Pythagoras' Constant. The square root of 2 (1.41) is known as [Pythagoras' Constant](#). It's also [the very first irrational number](#) ever to be discovered. But, the Babylonians discovered it a 1000 years before.

There are a total of zero zeros in Roman numerals. While the ancient Greeks were *aware* of zero as a concept, they didn't consider zero to be a number at all.

There is only one number spelled with the same number of letters as itself. Can you guess which one? No? Well, It's 4.

Often, the number 1 is confused as a prime number. But that's not the case—one does not fulfill the requirements to be prime (being divisible by both 1 and itself). Divide 1 by 1 and you get...1. Nothing has been divided.

Six weeks = 10! seconds (factorial). That is, $10 \times 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 3,628,800$ seconds = 60,480 minutes = 1,008 hours = 42 days = 6 weeks.

The city of Denver, Colorado, has an elevation of precisely 5,280 feet (at the State Capitol) —that's the length of a mile— which is why Denver is called the "mile high" city.

are transmitted between the user's dish and a satellite relay station up in the sky. The satellite relays data to the ISP (Internet Service Provider) dish back on the ground; from the ISP's hub, Internet traffic is carried via traditional terrestrial cables. There are pros and cons to satellite Internet.

On the plus side, satellite Internet can reach remote areas where no other type of Internet access can go. Satellite Internet is moderately fast; consumer data plans start at 20 Mbps. But there are limitations on the quality of satellite Internet.

The biggest is latency – the delay between sending a data packet and getting a reply. Latency can be a problem for interactive applications such as VoIP (internet calling), video chat, and online gaming. Streaming video may stutter due to buffering delays. Latency is higher in satellite Internet systems because the data signal must travel tens of thousands of miles to the satellite, down to the ground, and then back the same route again. (Satellites communicate via microwave radio signals, which travel at the speed of light.)

The geostationary communication satellites that are used for most satellite Internet services are about 22,230 miles above the Earth. So your actual data path is four times that, or over 89,000 miles. Here's why: A request for a web page is sent from your computer to a satellite out in space. The satellite contacts the provider's Network Operations Center (NOC) which requests the specific web page you have requested. The NOC then sends that data to the satellite, which sends it to your computer. So there are four transmissions from or to the satellite.

Even at the speed of light (186,000 miles per second) each request takes almost half a second (500 ms) to travel along that 89,200 mile path. That's a noticeable span when doing anything in "real time" such as playing a game, or having a voice conversation. This half-second satellite latency is imposed by the speed of light, but additional network latency can add to the problem of slow or stuttering performance.

Other Factors That Affect Satellite Internet

Weather can adversely affect satellite Internet, or knock it out entirely. When it's raining, the microwave radio signals between ground and satellite are diffused and weakened, in what is called "rain fade." Snowfall or dust storms can have similar effects. Even trees can affect reception of satellite Internet signals.

The positioning of your satellite dish is critical to good Internet reception. If your dish gets knocked out of alignment, speed will decrease or you may lose Internet access all together. It may take a visit from a service technician to get the dish aligned properly again.

Data caps are another potential drawback of satellite Internet. A satellite transponder's bandwidth is limited, and it's shared among many users on the ground. Bandwidth hogs who download excessive gigabytes of data during a billing period may be punished by overage charges, or by having their download speeds drastically reduced. The speed limit remains in effect until the next billing period starts.

Apple Tech Tips

by Judy Taylour

11+ SECRET IPHONE CODES YOU NEED TO TRY

– The dialer on your iPhone is much more than just a place to enter phone numbers and place a call. You can use it to enter secret codes to learn more about your iPhone, assist in troubleshooting, and even hide your caller ID during outgoing calls. developers and technicians primarily use to fix smartphones. In some cases, entering the code initiates an action immediately. But sometimes, you need to tap the Call button to activate it. [11+ Secret iPhone Codes You Need to Try \(makeuseof.com\)](#)

5 SIGNS IT'S TIME TO REPLACE YOUR MAC – 1. It's No Longer Getting Updates; 2. You Can't Run the Apps You Need; 3. You're Always Running Out of Storage Space; 4. You've Got Hardware Problems; and 5. The New Models Are Big Upgrades. Read more of this How-To Geek article at [5 Signs It's Time to Replace Your Mac \(howtogeek.com\)](#)

HOW TO BACK UP YOUR IPHONE OR IPAD – If you lose or break your iPhone, you have two options when it comes to your data: restore from a backup or start from scratch. Having a backup is a much more pleasant option, so you should take the time to run regular backups on your iPhone. Here's how, along with the specifics of each method. [How to Back Up Your iPhone or iPad \(makeuseof.com\)](#)

Similar to a cable Internet connection, bandwidth is shared in a pool of customers. So the actual upload and download speeds you experience on a satellite Internet connection will vary based on the number of people using the service at a given time. During peak hours, you can expect slower service.

Satellite Internet Service Providers

For many years in the United States, there have been just two primary satellite Internet access providers: HughesNet and ViaSat (formerly known as Exede). Other competitors such as WildBlue, EarthLink, Exede and Dish Network have either been purchased or discontinued. There are some small regional satellite internet providers, but HughesNet and ViaSat are the two whales in the fish tank.

[HughesNet](#), for example, offers satellite internet at "up to 50Mbps" with a 100GB data cap for \$49 monthly, and a 200GB plan (up to 100Mbps for \$65/month).

HughesNet has some data-saving features to help you stay within your monthly cap. It automatically compresses and optimizes web content, and lowers data rates for streaming video to 480p (DVD quality). If you're a night-owl, you can take advantage of the "Bonus Zone" which offers 50 GB/month of additional data to use during off-peak hours (2am-8am).

[ViaSat](#) takes a similar approach, but with slower speeds for home users. The residential Viasat Unleashed option costs \$100/month and promised download speeds "up to" 25-150 Mbps. Viasat advertises unlimited data, but the small print says if you exceed 850 GBs in any 30-day period, you will have "reduced priority during times of network congestion resulting in slower speeds."

[Starlink](#) is relatively new option that is providing stiff competition to the current players. Starlink is a SpaceX company that provides broadband satellite Internet access to locations where access has been unreliable, expensive, or completely unavailable. Starlink satellites have a much lower orbit (about 340 miles up) so it can provide higher speeds and lower latency than HughesNet or ViaSat. Typical download speeds will vary from 25 to 220 Mbps, but that comes with a higher price tag as well.

Fixed residential service starts at \$90-\$120 per month with a one-time \$599 equipment fee. The Roam option \$150/month for mobile users is a good option for RVers, campers, and travelers. [Business plans](#) offer faster download speeds at eye-watering prices ranging from \$250 to \$5000/month. Starlink service is available in most of North America and Europe. See the [Starlink coverage map](#).

Of special interest is [Starlink's Direct-to-Cell](#) project, that works with existing LTE smartphones. No extra hardware or special apps are required for text, voice, and data. Initially, only texting will be offered via Direct-to-Cell, with voice and data rolling out in 2025.

Scams

AI-Powered Scams

Perhaps the most obvious example of scammers using new technology to power existing scams comes from artificial intelligence (AI). For example, scammers might use AI to:

- Write more convincing and natural-sounding [phishing emails and text messages](#).
- Create deepfakes of celebrities to trick victims into thinking they're investing in a good company or project.
- Impersonate the victim's friend or relative and ask for money as part of a [grandparent scam](#).
- Impersonate an employer and ask for personal information.

The potential to create an image, video or voice of someone else could make existing scams even more believable, and opens up new opportunities for scammers.

It costs nothing to apply for student loan forgiveness, so someone asking you to pay a fee could be a scammer. In addition, the U.S. Department of Education won't contact you by phone. You can stay safe and avoid student loan forgiveness scams by going directly to the [Department of Education website](#) for information about applying for forgiveness.

<https://www.experian.com/blogs/ask-experian/the-latest-scams-you-need-to-aware-of/>

Other portable satellite Internet receivers are also available, but they provide much lower speeds and cost much more. Typically, only military, commercial maritime, or well-funded expeditions to the world's remotest regions use portable satellite Internet. However, you can rent mobile satellite internet equipment for short time spans at a more reasonable cost. [Inmarsat](#) offers packages that allow you to get online from almost anywhere on earth, but speeds tend to be only around 256Kbps.

The folks at [SatelliteInternet.com](#) published [an extensive study on satellite internet options for 2024](#). They've rated the HughesNet, ViaSat and Starlink satellite internet service options, with detailed "pros" and "cons" based on pricing, download speeds, technology, and customer service.

Satellite Internet beats dial-up, without question. If it's the only high-speed option available to you, it's worth the investment. Just don't expect the same reliability and performance that you get in more populated areas where DSL, cable and fiber optic Internet connections are available.

<https://askbobrankin.com/speed-is-satellite-internet-getting-faster.html>.

Smartphone Wireless Connections - Help Keep Us Connected

By Phil Sorrentino, Secretary and APCUG Rep
Sun City Center Computer Club, FL

The smartphone is a wireless marvel. You may not have thought about your smartphone in this way, but your smartphone may be able to connect to up to five different wireless networks. (I'm sure this would have made Nicola Tesla very happy, he is credited with the wireless transmission of energy via his patented Tesla coil, though Marconi got the credit, and the patent, for inventing radio communications.) Just think about the hardware and software that allow your smartphone to participate in five different kinds of networks, all wrapped up in your smartphone package along with all the other electronics needed to support a powerful computer system. I bet even Steve Jobs would be impressed.

Cell Phone Network

The most apparent wireless network your smartphone works with is the one you initially bought your smartphone to use; that is the cell phone network supported by all those antenna towers that have sprouted up all over in the past 40 years. (Not many landlines around anymore.) This network lets you keep in voice contact with just about anyone since over 91% of the people in the world has smartphones; that's over 6.6 billion possibilities. (Even more impressive is that most Americans – 97% now - own a cellphone. The share of Americans that own a smartphone is now over 85%). This cell phone network also provides access to the internet when



Virtual Tours

One of the largest natural history museums in the world, the **American Museum of Natural History** contains 34 million specimens of plants, animals, fossils, minerals, rocks, meteorites, human remains, and human cultural artifacts.

The museum's 360-degree virtual tours offer an up-close look at permanent exhibits, current exhibits, past exhibits, and research stations.

To view the virtual tour, [click here](#).

The **British Museum** is one of the largest in the world and houses over 8 million works within its walls. Established in 1759, it was the first public national museum in the world. Visitors can tour the great court and view some of the most famous objects in history, like the Elgin Marbles of Greece and the Rosetta Stone of Egypt.

You can go on a virtual visit to more than 60 galleries. To visit the British Museum's virtual tour page, [click here](#).

The **National Museum of Anthropology** is the largest and most visited museum in all of Mexico. The museum contains significant archaeological and anthropological artifacts from Mexico's pre-Columbian heritage, such as the Stone of the Sun (or the Aztec calendar stone) and the Aztec Xochipilli statue.

The museum has made more than 100 items available for Google visitors to explore from home.

To view the museum's online collection, [click here](#).

you are out and about. The internet is considered a "Wide Area Network" or WAN. A WAN is an extensive computer network spread over a wide geographic area. A network's speed is its data speed or data rate and is measured in bps or bits per second. Typically Mega bps or Giga bps. WAN data rates are typically around 150 Mbps. When you are not out and about and are within a Wi-Fi network, the Wi-Fi router provides access to the internet. Without this ability to be constantly connected to the internet, I'm not sure how many would own what would only be a competent personal digital assistant.

Wi-Fi Network

So, Wi-Fi is the second wireless network that your smartphone can take advantage of. Wi-Fi is considered a "Local Area Network" or LAN. A LAN is a collection of wired and/or wireless connected devices typically in your home or office. LAN data rates can be from 100 Mbps to 1 Gbps. Using Wi-Fi, you can connect to the many servers on the internet. The use of your smartphone in this manner is sometimes called "Cloud Computing" because you are accomplishing a task on the smartphone by using the resources of a server computer somewhere out there on the internet (in the cloud), like using GPS and the Maps or Waze app on your smartphone to help navigate you from home to a place you've never been to before. Cloud Computing is just a more common term for "Client-Server Technology," which allows our smartphones to take advantage of powerful computer servers connected by the internet.



GPS Network

Remember that every wireless network your smartphone can work with requires a transmitter, a receiver, and an antenna in the smartphone so that it can send data to and receive data from the other network members. (This is only possible because of digital electronic circuitry; this would never have been possible in the analog electronics world. Thanks to micro-miniature integrated circuits that typically get smaller and cheaper over time.) Though GPS, which is a third wireless network, is an exception. Your smartphone only has GPS receivers and antennas, no GPS transmitters. But it has multiple receivers because to determine your location, your smartphone has to receive data from at least 3 GPS satellites. (More detail than that may be the subject of a future article.)



Bluetooth Network

The fourth wireless network supported by your smartphone is Bluetooth. You may not have taken advantage of this feature unless you have a relatively new car and you have introduced (paired) your smartphone to the car's entertainment system. If you have, you are familiar with one of the best safety features in the



Interesting Internet Finds

Boston-based **GyroGear**, a medical tech startup, debuted a [hand-stabilizing glove](#) at CES 2024 that it hopes will help Parkinson's patients and those with hand tremors regain control of their lives. Dutch startup **Whispp** is using [audio-to-audio-based AI](#) to give people with vocal impairments a chance to have real-time conversations in their own natural voices. **OrCam** introduced a [host of devices](#) designed to help those with hearing loss deal with auditory overload.

Have you ever wondered what it's like to be a twin? Rex Wong, CEO of Hollo AI, says his company has created "AI personalization technology" that can create your digital twin in mere minutes after uploading a selfie and voice memos in a phone app. <https://hollo.ai/>

Consumer robotics firm **Ogmen** was at CES 2024 to show its new [ORo pet companion](#), an autonomous robot designed to assist with pet care by feeding, providing medicine and even playing with your dog using a ball launcher built into its chest.

Almost invisible when turned off, **LG's 77-inch transparent OLED screen** can switch between transparent mode and a more traditional black background for regular TV mode. Content is delivered wirelessly to the display using LG's Zero Connect Box which sends 4K images and sound.

new cars, the ability to receive and make calls from your smartphone while always keeping your hands on the steering wheel. (Now, if they could only convince the many speeding drivers to stay under the speed limit; another topic for a future article.) Bluetooth has also become the preferred connection for speakers and headphones (earbuds). Bluetooth headphones are for quiet listening, and Bluetooth speakers are for loud listening (a whole lot louder than the sound capability of the smartphone). Bluetooth is considered a "Personal Area Network" or PAN. A PAN is a computer network for interconnecting devices within a person's workspace. It transmits data among devices such as computers, smartphones, tablets, and personal digital assistants. Bluetooth data rates can be as high as 1 Mbps.

NFC Network

The fifth wireless network may not be available on some older smartphones or even some new ones. This network is called NFC or Near Field Communications. NFC is a set of communications protocols (rules) that enables communications between two devices over very short distances, maybe an inch or two. It facilitates data transfer between nearby smartphones, laptops, tablets, and other devices. NFC data rates are around 400 Mbps. NFC is used for making easy contactless payments with your smartphone using Apple Pay or Google Pay. Just enable the amount in the payment app and touch the smartphone to the NFC reader or terminal. This type of payment protects your payment information with multiple layers of security to help keep your account safe. The payment terminal does not share your card number when you pay, so your private information stays secure. So, with these five networks, your smartphone helps you keep in touch and connected.



Reprinted from the newsletter of <https://www.scccomputerclub.org/>, philsorr@yahoo.com.

Welcome to the extraordinary.

Are you ready to experience your future? The *Imagine RIT: Creativity and Innovation Festival* is the university's signature event, a showcase that displays the ingenuity of students, faculty, and staff. **The 2024 festival will be on Saturday, April 27. Rain or shine.** Many outdoor activities throughout the campus. 30 Lomb Memorial Drive Rochester, NY 14623 located in West Henrietta **Free and open to the public!** Bring the kids. Many 'hands on activities' for them to do. More info at imagine@rit.edu.

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.

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

Love and Marriage:

Only married people can understand how you can be miserable and happy at the same time. **Chris Rock**

How many husbands have I had? You mean apart from my own? **Zsa Zsa Gabor**

A good marriage would be between a blind woman and a deaf man.

Michel de Montaigne

We sleep in separate rooms. We have dinner apart. We take separate vacations. We're doing all we can to keep our marriage together.

Rodney Dangerfield

The only thing my husband and I have in common, is that we were married on the same day. **Phyllis Diller**

There's a name for someone who is always wrong all of the time – husband. **Bill Mayer**

I was married by a judge. I should have asked for a jury.

Groucho Marx

The best way to get most husbands to do something, is to suggest that perhaps they're too old to do it. **Anne Bancroft**

Getting married is a lot like getting into a hot tub of water. Once you get used to it, it ain't so hot. **Minnie Pearl**

Behind every great man, is a woman rolling her eyes.

Jim Carrey

Don't break someone's heart, they only have one. Break their bones, they have 206 of them.

Homer Simpson

Better to have loved and lost, than to live with a psychopath for the rest of your life.

**'World's Most Efficient Large Aircraft' Seeks Approval for
'Flying Bum'**

The Airlander 10 is revving up that rear

Story by Thomas Macaulay, February 29, 2024



A blimp billed as the “world’s most efficient large aircraft” — but better known as the “The Flying Bum” — is applying for approval to take off.

Officially named the Airlander 10, the voluptuous vehicle resembles the legendary [Zeppelin](#).

Like its fabled ancestor, the Airlander is greener than the commercial planes currently spraying CO2 across the sky. Much greener, in fact.

Powered by a combination of electricity and helium, the aircraft promises zero-emissions flights by 2030.

It's also got a sizeable capacity. The bulbous blimp can fit 100 seats or a 10-tonne payload between those shapely curves.

Those assets will now be inspected by aviation regulators. The Airlander's owner, Hybrid Air Vehicles (HAV), announced today that it's begun a process called Type Certification, which paves a path towards permission to fly.

Britain's Civil Aviation Authority (CAA) will now evaluate the safety of the aircraft.

Found on <https://thenextweb.com/news/airlander-10-flying-bum-regulatory-approval>.

Odds and Ends

A Chinese [eVTOL](#) (electric vertical takeoff and landing) vehicle maker conducted a demonstration flight of its pilotless flying vehicle in Latin America.

[EHang Holdings](#) flew its EH216 [electric aerial vehicle](#) (EAV) at the Reserva Conchal Resort in Costa Rica.



The flight was held in front of national authorities and media to help promote advanced air mobility (AAM) in the region.

“EHang is pleased to see EH216-S pilotless eVTOL flying for the first time in Latin America, demonstrating safe, efficient and sustainable advanced air mobility for everybody, in Costa Rica,” said Victoria Xiang, chief operating officer of EHang Europe and Latin America. “We are convinced of the enormous benefits that EHang’s UAM technology can bring to Latin America, and we are determined to continue collaborating closely with local stakeholders of the region, for making this new means of air mobility accessible to everybody in the continent.”

The long-range goal of the flying vehicles industry is to have EAVs evolve from piloted vehicles, such as the coming air taxis, to aerial vehicles that fly automatically, with no crew onboard.

Found on <https://www.iodworldtoday.com/flying-vehicles/flying-taxi-takes-demo-flight-in-costa-rica-pilotless>

Apple's Canceled Electric Car Project Wasn't Playing Safe With Design

By [Nadeem Sarwar](#)/March 11, 2024

Apple's reported [cancellation of its electric car project](#) has been met with mixed reception in the industry, with some fans expressing disappointment over what could've been. Elon Musk, chief of Tesla, [quipped](#) that "the natural state of a car company is dead." But it appears that Apple's planned EV underwent multiple ambitious design changes, one that aimed at blending retrofuturistic looks with functional modernity. According to [Bloomberg](#), one of the proposals was inspired by the Canoo Lifestyle cargo minivan, with an all-white exterior, glass sunroof, and black windows with an adjustable tint. The latter is not exactly a novel innovation, as it has appeared on everything from [concept phones](#) to [the cool new McLaren Artura Spider](#).

Another interesting touch was that the car offered an identical front and rear profile. Back in 2020, Amazon-owned [Zoox also revealed its self-driving robotaxi](#) with a standout bi-directional movement system. Technically, it forfeits the concept of front or rear seating. The [Cruise Origin](#), whose fate currently hangs by a thin thread, is another robotaxi that favors bidirectional ride engineering with looks to match.

But the most ambitious aspect of Apple's EV was a Level 5 self-driving system. According to [SAE](#), Level 5 autonomy means no input is required from the person in the driver's seat and the car can move around in all environments on its own. For perspective, Tesla's advanced driver assistance system (ADAS) sits at Level 2, while Mercedes-Benz's Drive Pilot tech has been certified for [Level 3, tagging alongside a bunch of practical concerns](#).

Read more at <https://www.slashgear.com/1536498/apple-electric-car-designs-leak/>.

Efficient AI Ahead: USC's Memristor Breakthrough Transforms Analog Computing

By University of Southern California March 14, 2024

Researchers have made significant advances in memristor technology, enhancing its precision and efficiency. This innovation promises to bridge the gap between analog and digital computing, offering faster, more energy-efficient processing suitable for AI, machine learning, and beyond.

Design combines the best of digital and analog computing and delivers >10x energy efficiency.

While most of computing in the world is still digital, the data around us is captured in analog via sensors—images through cameras, temperature, and sound, for example and has to be converted in a digital form for precision. But imagine an autonomous vehicle that needs to capture what's on the road etc. and then make decisions

instantaneously, this data needs to be converted—very quickly with low energy and high precision. What if newly designed analog chips could provide the precision of digital computing with the energy-saving and high-speed advantages of analog computing?

Advances in Memristor Technology

If a computer chip is made up of various circuits, a memristor is a relatively small-sized component of a circuit that stores and processes data very efficiently. In a previous paper from the lab of USC Viterbi School of Engineering Electrical and Computer Engineering professor, J. Joshua Yang, researchers were able to tweak a memristor to achieve unprecedented precision.

This type of improvement is critical, says Yang as such innovations can be applied to train neural networks which are needed to develop artificial intelligence (AI) and machine learning (ML) but thus far can only be done in very expensively with digital systems. The innovation will also enable new applications beyond AI and ML, such as scientific computing for such as weather forecasting.

Read the whole article at <https://scitechdaily.com/efficient-ai-ahead-uscs-memristor-breakthrough-transforms-analog-computing/>.

CLUB and REGIONAL NEWS

The **TOTAL SOLAR ECLIPSE** is coming to Rochester on Monday, April 8, 2024. This happens when the moon passes in front of the sun, perfectly blocking its surface. Although the moon passes between the Earth and sun every day, the three celestial objects will be aligned perfectly for three minutes and 38 seconds of darkness. For more information, <https://rochestereclipse2024.org/>.

This is a once-in-a-lifetime event. Do you know [how rare it is to see a total solar eclipse?](#) The last one experienced in Rochester occurred in 1925 (that's almost 100 years ago!) and our area won't see another one until the year 2144, approximately 120 years from now. Catch this opportunity while you can to experience three minutes and 38 seconds of totality!

The Greater Rochester Region is in the path of totality! Almost everyone in the nine-county region will get to fully experience a total solar eclipse.

Timing: 2:07 PM: Eclipse begins as Moon will begin to cover the Sun

3:20 PM: Totality Begins. Duration depends on where you're in the path of totality

4:33 PM: Eclipse ends for Rochester viewers

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Imagine RIT: Creativity and Innovation Festival

The 2024 festival will be on Saturday, April 27.

Rain or shine. Bring the kids. Many 'hands on activities' for them to do. More info at imagine@rit.edu.

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.

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