

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, and download a printed form for use by the Post Office mail, **or** enter your info online and pay with a credit card or PayPal, **or** attend a meeting.

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



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**November 8, 'Gifts and Gadgets', Arpad Kovacs
'Newest Nanobots', Tony Dellelo**

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

January 10, 2023, TBD

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What Is Smishing?

by Leo Notenboom, <https://askleo.com/>
Making Technology Work For Everyone

Whatever it is, it's on the rise, and you need to watch for it.

Smishing is simply text-messaging spam. Learn to recognize and respond appropriately to it. *Smishing* is nothing more than [phishing](#) using [SMS](#) text messages. I'll review some of the examples I've received and go over exactly what you should *and should not do* when you receive one of these messages.



“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:

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

Smishing: text messaging spam

Spammers are now using SMS text messages to attempt to lure you into compromising yourself. It's important you understand this possibility exists and that you ignore or block text messages from numbers you don't recognize.

It's on the rise

Honestly, I'm surprised there hasn't been more of it sooner. Phishing via email has become commonplace. We expect it. We learn to recognize it. Hopefully, we don't fall for it.

Text messaging [spam](#), on the other hand, is rather new, at least in the quantities we're seeing today. Not everyone has seen it. That means many don't know what to do when they get it. It all feels very innocuous until you fall for it — just like email phishing.

What to not do

The single most important thing to take away from this discussion is this: ignore text messages from people you don't know. This can be surprisingly difficult because of how smishing is constructed. Here's one example.



It looks like a misdirected text. It's crafted to make you think that someone is simply texting the wrong number. It plays on your kindness, since many people would respond to this saying, “You have the wrong number.”

That's not what's happening at all. If you reply, the person at the other end will politely apologize and then attempt to engage you in further conversation. Eventually, after having built up some rapport, they will encourage you to visit a link. A link that further misleads you and compromises your security — just like phishing.

Sometimes they don't even try to be creative.

APCUG, An International
Association of Technology and
Computer User Groups

<https://apcug2.org/>

Saturday Safaris

Exploring Technology in Depth
Saturdays:

12 pm – 2 pm

February 12, May 7, August 27,
and November 5 (along with the
annual APCUG meeting)

<https://apcug2.org/saturday-safaris/>

Tech for Seniors

<https://www.techforseniors.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:

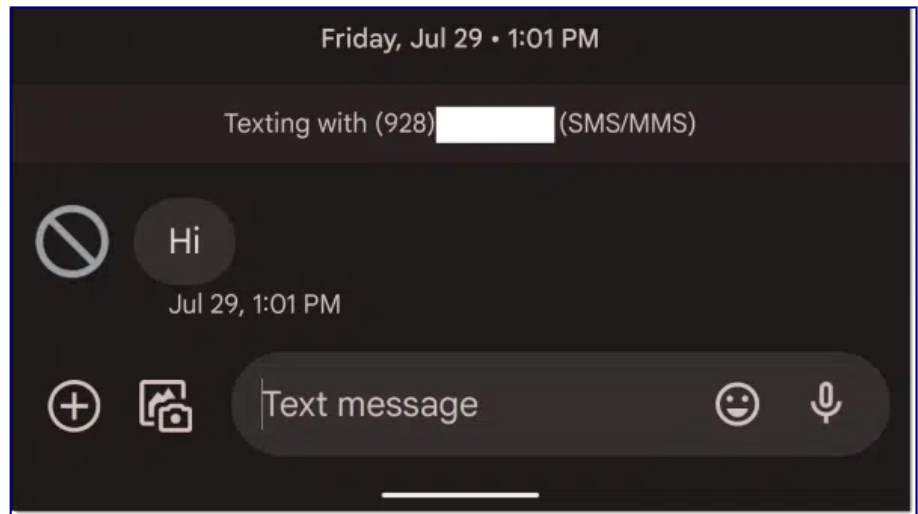
<https://apcug2.org/50-best-mac-tips-tricks-timesavers/>

Penguin Platform (Linux):

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

Chromebook Tips And Tricks:

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



The intent is the same: to get you to respond, engage in conversation, and eventually do something that is not secure.

Do this instead

You'll note that both of my examples above have a '**stop**' indicator prior to the message. That's because I marked these as spam in my telephone's messaging app. Exactly how you do this varies depending on your phone and the SMS text messaging app you use. Most will have either a long press menu or a three dots "..." menu that includes a Report Spam option.

In my case, reporting spam also blocks that number. That means any further attempts to contact me via SMS from that number will not be delivered. I recommend letting that happen, especially when you realize the phone number is not one you recognize.

Finally, some carriers also include automatic spam detection, which I recommend enabling. Many of the text messages I had previously been getting alerts for are now automatically and silently shuffled into that spam folder without me having to notice or do a thing.

Do this

Learn to recognize smishing. In particular, don't respond to text messages from unknown senders. If you have the option, mark smishing attempts as spam in your SMS text messaging app and block those numbers from attempting to contact you again.

But above all, don't click links or do things that sound suspicious if you are engaging in a conversation with someone you've never met.

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End of Article # #

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Planning Meeting

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

Got Questions?:

Windows: Arpad Kovacs
podcomputer@gmail.com
Linux & some Mac:
Carl Schmidtman
unixgeek@faultline.com

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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How is Wearable Devices Revolutionizing Medical IoT?

by [Rebecca Williams](#), Aug/2022

Wearable devices are the center of attraction for every discussion that aims to define innovation in IoT. Read more to know how IoT is revolutionizing the healthcare sector.

Wearable devices are the center of attraction for every discussion that aims to define innovation in IoT. The wearable medical devices market is expected to reach USD 14.41 Billion by 2022 from USD 5.31 Billion in 2016, at a CAGR of 18.3% during the forecast period (Source). Technology has enabled users to monitor their health indicators constantly and significantly reduce preventive and monitoring costs. Wearable devices are chosen for this task and are one of the most efficient integrations to telemedicine and telehealth besides the mobile. This article will explore some of this realm's important aspects.

Let's Know Wearable Devices Better

The most relevant definition of wearable electronics is the “devices that can be worn or mated with the human skin to constantly and closely monitor an individual's activities without interrupting user's motions.”

Today, the range of wearable systems, including micro-sensors, seamlessly integrate into various industries such as textiles, consumer electronics, automatic watches, belt-worn personal computers, and glasses. Due to this, they are now designed to cater to a broader spectrum of applications.

The combination of wearable and health monitoring systems aims to minimize wearable devices' size, measure vital signs, and send secure and reliable data using smartphones. Hence, one of the obvious applications of wearable systems is monitoring the physiological parameters in the mobile environment.

Application of Wearable Devices in Healthcare

The busy world has led to a life that focuses on shuttling between various tasks. This has caused most of us to ignore one of the most important aspects of our lives, “health and fitness.” A simple health checkup by the doctor requires a plethora of medical examinations followed by prescriptions and treatments that consume a great deal of time. This is probably the most potent reason people only visit a doctor when suffering from illness. The very attitude paves ways to find alternatives, such as a device that can be worn on the body and has the potential to monitor the user's health in real-time, constantly. These devices should also provide the users and the medical practitioner with insight into various health parameters. Wearables are generally aimed at fulfilling these objectives in the healthcare ecosystem.

- 56% of the Americans use some kind of wearable technology.
- 88% of the physicians want patients to monitor their health parameters at home.
- 35% of the employers use medical wearable technology to improve the quality of wellness programs and lower health insurance costs.
- Wearable technology drops hospital costs by 16% over 5 years

Tidbits of probably useless information

Most popular dogs

It goes without saying that in your house, your dog is the most popular. But what do the statistics say? The American Kennel Club has used registration data to compile the list of the most popular breeds. As always, the [Labrador Retriever](#) tops the list — this time for the 31st year! [The Lab's temperament and versatility are just two of the traits](#) that contribute to its perennial popularity.

In a time when there are more [families with dogs than with children](#), it's no surprise that the breeds vary widely, from large guard dogs, to agile herders, to tiny toy breeds and everything in between. Some breeds even increase in [popularity based on TV shows and movies](#). [The pandemic](#) has been an especially favorable time for new dog owners to decide to [bring home a puppy](#).

2. [French Bulldogs](#)
3. [Retrievers \(Golden\)](#)
4. [German Shepherd Dogs](#)
5. [Poodles](#)
6. [Bulldogs](#)
7. [Beagles](#)
8. [Rottweilers](#)
9. [Pointers \(German Shorthaired\)](#)
10. [Dachshunds](#)

At the bottom of the list is the intriguing [Norwegian Lundehund](#), one of the rarest breeds of dogs, which ranks 197 of 197 breeds.

The [Norwegian Lundehund](#) – literally, “puffin dog” – [would scale sheer-faced cliffs](#) to raid puffin nests, bringing the still-live birds back to their masters.

<https://www.akc.org/expert-advice/dog-breeds/most-popular-dog-breeds-of-2021/>

Some other applications of wearables [IoT in healthcare](#) can be listed as follows.

1. Motion Tracking

Human movement tracking has various valuable applications in sports, medical, and other branches of studies. These applications include fall risk assessment, qualifying sports exercises, analyzing people's habits, and monitoring them. Wearable trackers are gaining worldwide popularity for their ability to accomplish all these tasks, aid users in performing their daily workouts and help them manage their activity at the tip of their fingers. They also keep the users abreast of their daily motions like distance walked, which enables them to keep track of their activities and ensure a healthy life.

2. Vital Sign Monitoring

This is one of the most crucial applications of IoT in medicine. Constant monitoring has enabled adequate healthcare for patients. More than half of the wearable users believe that technology has improved mental health. Making smart use of complex algorithms and their analysis, wearables foster better medical attention and care for patients in remote areas or places that stay aloof from immediate medical help. Remote patient monitoring saves the healthcare system \$200 billion over 25 years. Many wearable devices have been implemented to measure critical elements in the healthcare monitoring ecosystem. These devices include names like an electrocardiogram (ECG) and electroencephalogram (EEG) measurement, skin temperature regulators, etc., and mark the efforts of wearable devices to provide multi-task vital signs measurement.

3. Improve Patient Experience

Seamless connection between the devices has enabled patients to control room temperature and electronics and even communicate with loved ones or call medical assistance with a few clicks. Even the medical practitioners can access the patient's information on the go through the cloud availability. This has, in turn, facilitated the patients and the medical aids to relish a great user experience.

Challenges Faced by Wearables for medical IoT

IoT devices should be empowered with easy-to-use and robust application access. Worldwide, researchers have proposed multiple platforms and structures that have formed the base of commercial devices available for bio-medical parameter measurement. However, there are still many challenges that need to be addressed. Here are the four key capabilities that are missing from the leading platforms.

1. Simple and Secure Connectivity

A good IoT platform should enable easy connection of devices and perform device management functions on three levels data collection, data transmission to the hub, and permanent storage of observation values to the medical station. The steps should be carried out most securely to ensure accurate data transmission and to protect the data. For this, encryption is necessary.

Windows & Android Tips

Judy Tylour

YOUR PHONE CAN DOUBLE AS A PC

– Phones have become increasingly more powerful over the years. Nowadays, even a low-end smartphone has more power than a standard PC or laptop from a decade ago. So why can't you use your phone in place of a computer? The good news is you can. There are several ways to use your phone as an alternative to a traditional computer and plenty of reasons you should consider doing so. Phones are far more portable, you're likely to always have one with you, and if your phone meets all your computing needs, it may even save you a few hundred dollars. Read more at [Your Phone Can Double as a PC – Review Geek](#)

5 WAYS TO TRANSFER FILES FROM ONE COMPUTER TO ANOTHER

– Need to transfer files from one PC to another? This article shows how to do that quickly and easily, using both hardware and software. [5 Ways to Transfer Files From One Computer to Another \(makeuseof.com\)](#)

HOW LONG WILL MICROSOFT SUPPORT WINDOWS 10?

– Windows 10 won't go away until October 14, 2025, but the fine print says you must keep your PC up to date in other ways to avoid being cut off from support. This applies to both Home and Pro versions of Windows 10. [How Long Will Microsoft Support Windows 10? | PCMag](#)

2. Power Consumption

Power consumption is one of the most crucial things to provide the user with easy device management and long-term, uninterrupted monitoring. These factors can be correlated to the number of parameters being monitored, code efficiency, data packaging, encryption, and compression.

3. Wearability

Wearable devices are specifically designed for biomedical monitoring. This, in turn, assists individuals in living long and healthy lives. This point is more significant when elderly people are using the devices. Therefore, such devices must be easy to use and carry and offer users comfort. These requirements can be easily overcome by making light, small, and well-structured devices that can be used for a long duration.

4. Risk Associated with Data Loss

While the data is being transferred from the collecting element, microcontroller, to the smartphone or cloud storage, there are chances of disconnection that might lead to data loss. A safe health monitoring system must ensure to overcome this shortcoming. One of the potential solutions to this is temporary data saving in the microcontroller.

Conclusion

Wearable devices have been gaining worldwide popularity in diverse fields, including sports and fitness to health monitoring. It has enabled individual tracking of the number of parameters in their living or working environment. The IoT devices and wearables are here to stay. Their popularity and usage are expected to surge significantly over the next few years. As the Giants take it to the forefront of [IoT development services](#) It is evident that IoT and wearables will form a major part of the healthcare industry.

Source: [Free Guest Posting Articles](#) from ArticlesFactory.com

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

Shopping for a New Smartphone

By Tom Burt, Vice President
Sun City Summerlin Computer Club

I've been looking at new smartphones for a few months, and now, with "Black Friday" and "Cyber Monday" sales in full force, it seemed like an interesting topic for a monthly column. As with most technology, the purchase process has become very complex. Smartphones have evolved to where you're buying a mobile computer that can also make calls on the cellular phone network.

At Casa de Burt, both Mrs. and I have been using fairly simple, low-end LG Android phones with 5-inch screens, modest cameras, and minimal storage. Originally, we had these mainly for emergency use when out and about. However, inevitably, they become more integral to one's daily existence in the modern technical world. Also, LG is exiting

Photo & Image Software

www.davescomputertips.com

[PicPick Screen Capture](#) – Best free screen capture tool. Built-in editor with superior range of editing and annotation tools. Portable version available.

[FastStone Image Viewer](#) – Excellent free image browser, editor and converter that supports all major graphic formats. Nice array of features such as image comparison, red-eye removal, emailing, resizing, cropping, color adjustments and musical slideshow.

[IrfanView](#) – Popular free image viewer, editor, optimizer. Heaps of features. One of the very best.

[Paint.Net](#) – A free well designed image editor with an attractive interface. A medium level editor with lots of options and tools comparable to commercial software.

PC Hardware

[Crucial Memory](#) – The leading source of quality RAM memory. Great selection, good prices, excellent support, and a lifetime warranty! A real winner!

[HP Computers](#) – HP is currently my pick for both laptop and desktop computers. Great prices and performance. The design of their current laptop line is simply beautiful!

[Newegg](#) – My current pick for DIY computers and computer components such as hard drives, motherboards, cpu's, sound cards, and video cards! Newegg has the best customer service and their prices can't be beat! Great Products! Great Prices! Great Customer Service! A Trifecta for geeks.

the smartphone business, and our phones' versions of Android are well out of support, so compatibility with future apps is a growing concern.

Carrier Technology (4G / 5G)

The cellular phone/data network has evolved over the years through successive generations: 2G, 3G, 4G, 4G LTE, and now 5G. A 6G standard is already in the works. If you're interested in a deep dig, here's an extensive article describing the history and current state of signaling technology: https://en.wikipedia.org/wiki/Cellular_network.

Older generations of the 3G GSM and CDMA standards are being phased out. As a result, older cell phones that can only access GSM or CDMA cell networks may no longer work after mid-April 2022. If buying a new phone, check to see if it's compatible with T-Mobile/Sprint, Verizon, or AT&T. Most new unlocked phones are compatible with all three.

All newer phones support 4G and 4G LTE; many support 5G. The main difference between 4G and 5G is that 5G offers higher data speeds. If you're not getting reliable 5G service from your carrier, there's little benefit in having a 5G phone.

Phone Brand and Hardware Specs

The major makers of cell phones include Apple, Samsung, LG, Motorola, and Google. Apple and Samsung are the major players in the US, with a combined 78% market share. LG announced its exit from the mobile phone business as of July 31, 2021.

Key hardware features to pay attention to are:

Processor cores and speed

New Apple iPhones use custom Apple-designed 6-core processor chips (A14, A15) that support the ARM (Advanced RISC Machines) instruction set with Apple extensions. New Android phones use ARM architecture processors primarily from Qualcomm (Snapdragon series), Samsung (Exynos series), MediaTek (Dimensity series), HiSilicon (Kirin series), and Google (Tensor series). In addition, the latest Android phones are coming with 8-core 64-bit processors running at up to 2.8 GHz clock speeds, so they compare well to mid-range desktop processors.

As you might expect, a higher-end processor yields better performance for running apps on your phone.

RAM memory

New smartphones come with 1G-byte to 4 G-bytes of internal RAM (memory for running active programs). More RAM is better but will increase the price of the phone. I'd recommend at least 2 G-bytes of RAM for running newer versions of Android (10 or 11).

Onboard solid-state storage

Newer phones now offer anywhere from 16 G-bytes to 512 G-bytes of onboard solid-state data storage. The data stored includes the operating system, all apps, and end-user data. If you use your phone to store videos, pictures, or music, you'll want a phone with at least 32 G-bytes of storage. Most phones allow you to add a SD flash card for additional storage.

Nexar Beam Dash Cam

By George Harding, Treasurer,
Tucson Computer Society



This product is useful and installs with minimum effort. It is a plug-and-play dashcam that installs behind the rear-view mirror.

It records 1080p full HD video, which gives you a vivid 135-degree picture of the view from your windshield. Recording can be up to 4 hours.

A nice feature is the parking mode. Here, you get 24/7 security, and the dashcam can sense any impact and starts recording instantly. In addition, recorded footage can be downloaded to your cell phone for viewing. The included GPS feature even retains the vehicle location.

The companion app allows for live or delayed viewing of footage. In addition, recordings are backed up to the cloud, making them easy to use.

The dashcam comes with a 32GB microSD card, which can be upgraded if desired. In addition, unlimited, free cloud storage means that even if the dashcam is lost or stolen, the recordings can still be viewed and accessed from anywhere.

This is a really nifty device that is useful and maybe the key to proving liability in an accident.

From <https://aztcs.apcug.org/>,
actuary110@yahoo.com.

Nexar Beam Dash Cam

<https://shop.getnexar.com/product/nexar-beam-gps-dash-cam>

Priced at \$140

Screen size and pixel resolution

Most new phones have a physical screen size close to 6.5 inches by 3 inches. Resolutions (pixels per inch) vary, with higher resolutions costing more. A typical mid-range screen (Moto G) is 1600 x 720 – about 267 pixels per inch. Some Apple 13 iPhones with Retina displays have 460 pixels per inch resolution.

Wi-Fi connectivity

Virtually all smartphones can connect to a Wi-Fi router and connect to the Internet for web surfing, email, and many “connected” apps. Most phones now support connecting via either the 2.4 GHz or 5 GHz bands using the 802.11AC standard. Some newer phones now also support the Wi-Fi 6 (802.11AX) standard. When shopping, look for 802.11AX or Wi-Fi 6 to “future proof” your phone. However, 802.11AC (Wi-Fi 5) is still OK.

Bluetooth connectivity

Bluetooth is a short-range radio connection alternative to Wi-Fi. It’s handy for connecting to your car’s in-dash entertainment console for hands-free phone operation or for connecting your phone to a Bluetooth headset (again for hands-free calling). With appropriate apps, you can also use Bluetooth to connect to other users’ phones when there’s no Wi-Fi router nearby.

Motion sensing / Accelerometer

Many newer phones have a built-in accelerometer. These are often used by gaming and virtual reality apps so that your phone’s motion can be tracked, allowing it to function as a game controller or a game weapon. Or it might be used to sense activity while you’re working out.

Headphone Jack

A headphone jack is important if you want to plug in wired headphones so you can listen to music or videos on your phone without disturbing others. However, there are also inexpensive rechargeable wireless Bluetooth earbuds that allow you to listen, even if the phone lacks a headphone jack.

USB connector

Newer Android phones come with a USB-C (small, symmetric) connector that can be used to charge and pass data between the phone and another device. Older phones used a “micro-USB” d-shaped connector. The charging cable for your phone should have the correct connector on one end and a USB-A (rectangular) connector on the other.

Battery Life

Most new smartphones have batteries rated 4000 to 5000 milliamp hours, translating to 36 to 40 hours of talk time. Generally, a higher capacity battery gives more talk time, but this will also depend on the processor speed, the amount of RAM and storage, the apps you use, and how much data is transferred over the Wi-Fi connection.

Phone Software Features

Apple iPhones run Apple’s proprietary iOS (12, 13, or 14) operating system. Phones from other makers primarily run Google’s Android operating system; newer phones typically run Android 10 or 11. In

Unusual Product

Safe Cam 360 - Always Know What's Going On At Home, No Matter Where You Are



A recession like the one we're living through also means one thing for homeowners: skyrocketing burglary, robbery, and vandalism. That's why a reliable home security camera is essential these days.

However, instead of spending hundreds, even thousands of dollars on overpriced equipment, you can now use **this superior home security camera at a fraction** of the price of "pro" equipment.

It's installed in seconds, rotates 360°, records in HD, and **doesn't require wires, batteries, or monthly cloud storage fees**. It has two way audio, blaring alarms to scare away intruders, night vision, bright lights, controlled by an app, and thanks to its advanced motion tracking, it follows anyone or anything it sees for 360°!

The Safe Cam 360 connects to your home's WiFi and you can access it 24/7 through your phone (iOS and Android).

[Get yours now to enjoy complete peace of mind when you're away from your home.](#)

Hurry, \$46 sale.

addition, some inexpensive Chinese phones may be running Linux-based operating systems that can also run Android apps. For example, Huawei, which is now banned in the U.S., uses HarmonyOS in its Chinese smartphones.

Out of the box, the features of a smartphone are determined by its operating system and the built-in apps. For example, for the Apple iPhone, the Apple app store offers an extensive catalog of additional free and paid iOS-compatible applications. Similarly, the Google Play store offers an extensive catalog of free and paid Android-compatible applications for Android phones.

Baseline bundled apps for all phones include a phone app (includes contacts), a text messaging app, the settings app, a file manager app, a camera app, and an app to interface to either the Apple app store or the Google Play store. You will also find a photo viewer, a music player, a video player, a web browser, and an email app. Your phone carrier may also add vendor-specific apps.

Many new phones offer facial or fingerprint recognition to secure your phone while not requiring a PIN or password to unlock the screen.

Shopping Options

You can buy a new phone at many retail stores or at online retailers. Many of these are packaged with a prepaid plan from one of the carriers. You can also buy phones directly from the various carriers at the retail or online stores. Often, the carriers have the best pricing, but the phones will be "locked" to that carrier's network. "Unlocked" phones (compatible with many or all carriers) can be bought, but prices tend to be higher. Be careful buying phones on eBay – especially "used" phones.

Many carriers offer phones at large discounts but require an expensive phone plan to get reasonable pricing. After you buy the phone, you may need to get a SIM (Subscriber Identity Module) card for it from your preferred carrier and then activate the phone on that carrier's network.

Buying a New Phone from a Carrier's Phone Store – Experiences

As noted above, you can often find some really good deals by shopping your current carrier's online or brick-and-mortar store. Of course, phones you buy from your carrier will be "locked" to that carrier's network, but if you like your current plan, that should not be a problem.

Mrs. Burt has a low-cost prepaid phone plan with Boost Mobile (a subsidiary of T-Mobile / Sprint). As a result, we could buy her a very nice Motorola Moto G Pure phone for \$59.99 (pre-Black Friday special). In the Boost Mobile website screenshot, the price had dropped to \$49.99 on Black Friday). The Moto G Pure has 3GB of RAM and 32GB of onboard storage and is powered by a MediaTek 8-core CPU and runs Android 11. So for Mrs. Burt, it's a perfect fit for her needs. Once the new phone



*** * Jokes Stolen from Everywhere * ***

Danish Anwar I am currently a Canadian citizen, but was born in Moscow. So no matter where I travel, the authorities get suspicious of a brown guy carrying a Canadian passport that says he's from Russia. It looks like the worst forgery of all time. Like I got my fake papers at a terrorist discount store called Wal-Martyr.

Matt Jenkins (black) The other day I saw this bumper sticker that said, "If you love your freedom, thank a Veteran." So I found a Veteran, I went over to him, I'm "Excuse me, Sir. Thank you for my freedom." He's like, "Son, I didn't fight in THAT war."

I know nothing about wine, so I buy bottles based on the label's art. My wife asked me what type of wine I wanted with dinner. I'm like, "Bear in a scuba suit."

Narin Vann My conservative friends blame China and my liberal friends blame Trump for the handling of the Coronavirus. I'm going to take a centralist approach and blame Mandarin oranges.

Zach Bragg My death row meal would be a peanut butter and jelly sandwich because I'm allergic to peanuts, and I'm leaving this world on my own terms.

Chris Moore In high school I took a Korean girl to homecoming, and my conservative aunt told me to stick to my own kind. Twenty years later I actually followed instructions, and she refuses to meet my boyfriend.

arrived, it was easy to activate her new Moto G on the Boost Mobile website, keeping her current phone number. My experience with the AT&T website was less successful. All their phones for regular plans are offered on a 36-month time contract. You pay a certain amount per month (\$5 to \$20, depending on the phone) and, after 36 months, you own the phone. However, you have to buy a plan that costs at least \$75 a month to get those good prices! After 36 months, you can trade the old phone in and get a new one, starting another 36-month time contract. Effectively, the customer is renting the phone.

The AT&T prepaid plans offer a small selection of phones for flat purchase prices. However, all these phones are locked to the AT&T network. I looked at Verizon, and their plans, phone prices, and terms are about the same as AT&T's. I finally decided to switch from AT&T to Boost Mobile and get a Moto G Power phone (\$67 on Cyber Monday) for myself.

Final Thoughts

Your choice of smartphone depends a lot on your connectivity needs and how you use the phone as a mobile computer. Phones eventually wear out, but most succumb to mishaps like getting dropped, dunked, or lost. With care, a phone should last five years or more – long enough to where it will become obsolete before it wears out.

Lastly, in buying a smartphone, don't forget its phone functionality. You won't be happy if your phone drops calls or has poor reception. Read the online reviews before buying and look for comments about phone reception.

From <https://www.scscc.club>, tomburt89134@cox.net.

*** * * * * 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.

To help meet global EV demand, researchers develop sustainable method of recycling older lithium-ion batteries

By Safa Jinje, Oct 3, 2022

A University of Toronto researcher has developed a new technique to help recycle the metals in lithium-ion batteries, which are in high demand amid surging global sales of electric vehicles.

Gisele Azimi, a professor in the departments of materials science and engineering and chemical engineering and applied chemistry in the Faculty of Applied Science & Engineering, and her team have proposed a new, more sustainable method to mine valuable metals – including lithium, but also cobalt, nickel and manganese – from lithium-ion batteries that have reached the end of their useful lifespan.

Odds and Ends

Identity Theft

Identity (ID) theft happens when someone steals your personal information to commit fraud.

The identity thief may use your information to apply for credit, file taxes, or get medical services. These acts can damage your credit status, and cost you time and money to restore your good name.

You may not know that you've experienced ID theft immediately. You could be affected by ID theft if you receive:

Bills for items you didn't buy

Debt collection calls for accounts you didn't open

Denials for loan applications

Anyone can experience identity theft. Children and seniors are both vulnerable to ID theft. [Child ID theft](#) may go undetected for many years. Victims may not know until they're adults, applying for their own loans.

Seniors often share their personal information with doctors and caregivers. The number of people and offices that access seniors' information put them at risk.

There are several common types of identity theft that can affect you:

[Tax ID theft](#) - Someone uses your Social Security number to falsely file tax returns with the IRS or your state.

[Medical ID theft](#) - Someone steals your Medicare ID or health insurance member number.

Thieves use this information to get medical services or send fake bills to your health insurer.

[Unemployment ID theft](#) - Someone uses your personal information to claim (and receive) unemployment benefits.

[Read](#) about how you can prevent identity theft.

"Getting these metals from raw ore takes a lot of energy," says **Jiakai (Kevin) Zhang**, a PhD candidate in chemical engineering and applied chemistry who is lead author on a new paper recently published in [Resources, Conservation and Recycling](#).

"If we recycle existing batteries, we can sustain the constrained supply chain and help bring down the cost of EV batteries, making the vehicles more affordable."

Part of Canada's commitment to reach net-zero emissions by 2050 includes a mandatory target requiring 100 per cent of new light-duty cars and passenger trucks sold in the country to be electric by 2035

Achieving this target will require an increase in the supply of critical metals, the price of which is already very high. For example, cobalt, a key ingredient in the cathode production of lithium-nickel-manganese-cobalt-oxide (commonly abbreviated as NMC) batteries widely used in EVs, is also one of the most expensive components of lithium-ion batteries due to its limited reserve.

"We are about to reach a point where many lithium-ion batteries are reaching their end of life," says Azimi. "These batteries are still very rich in elements of interest and can provide a crucial resource for recovery."

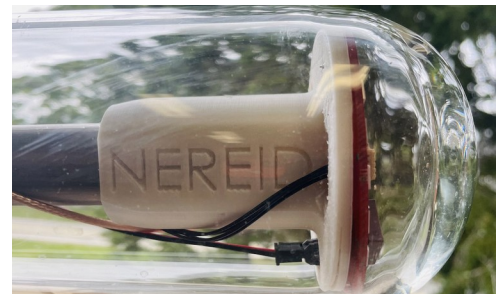
Continue the article at <https://www.utoronto.ca/news/help-meet-global-ev-demand-researchers-develop-sustainable-method-recycling-older-lithium-ion>.

* * * * * CLUB and REGIONAL NEWS * * * * *

Bioplastics made of bacteria to reduce plastic waste in oceans

October 6, 2022

The Nereid Biomaterials team, including Rochester biologist Anne S. Meyer, has created the first ocean instrument made with 3D-printed internal parts composed of bioplastics. The instrument will be replicated and deployed in swarms to enable distributed measurements of the ocean carbon cycle. But because they will be made of bioplastic designed to degrade in oceans, the instruments will not add to the growing problem of (nondegradable) plastic marine pollution. Future applications may extend well beyond ocean instrumentation. (Melissa Omand / University of Rhode Island)



A team of scientists, including Rochester biologist Anne S. Meyer, is developing bioplastics to degrade in oceans.

Plastic waste poses an urgent problem for our planet's ecosystems, especially our waterways. Millions of tons of plastic waste enter Earth's oceans every year, and plastic has been found in every part of the ocean, including at the bottom of the deepest ocean trenches.

Although some biodegradable plastics, or bioplastics, have recently been developed, these plastics were intended to break down in industrial compost facilities. In cold, dark ocean environments, they break down very slowly.

What if there were a way to avoid the problem of plastic pollution while still reaping the benefits of plastic's durability, versatility, and low cost?

In order to tackle this problem, [Anne S. Meyer](#), an associate professor in the [Department of Biology](#) at the [University of Rochester](#), worked with marine microbiologist Alyson Santoro at the University of California, Santa Barbara; University of Rhode Island oceanographer Melissa Omand; ecologist Ryan Freedman from the Channel Islands National Marine Sanctuary; and industry partner [Mango Materials](#). Together, the team is developing bioplastics—environmentally friendly plastic materials engineered to degrade in ocean environments.

Supported by the National Science Foundation's [Convergence Accelerator](#) program, the group, collectively known as [Nereid Biomaterials](#), is now poised to enter [Phase 2](#) of their project, in which they will test their biodegradable bioplastic. The team recently learned they are the recipients of a \$5 million NSF Phase 2 grant, of which \$1 million was awarded to Meyer and her lab.

Read the rest at <https://www.rochester.edu/newscenter/bioplastics-reduce-plastic-waste-in-oceans-536322/>.

Maker Faire Rochester

Saturday, November 19th, 2022, 9 am to 5 pm

What is Maker Faire?

Maker Faire is a gathering of fascinating, curious people who enjoy learning and who love sharing what they can do. From engineers to artists to scientists to crafters, Maker Faire is a venue for these "makers" to show hobbies, experiments, projects. We call it the Greatest Show (& Tell) on Earth - a family-friendly showcase of invention, creativity, and resourcefulness. Glimpse the future and get inspired!

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 should 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 13th meeting.

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>.

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

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**