

Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and new technology. Established in 1981, our aim is to provide an exchange of information between users of digital devices. We are not in any way affiliated with any computer manufacturer or software company, and we do not sell your data or email address.

Program Meetings
No admission fee for nonmembers. Everyone is
welcome! Second Tuesday of
every month, except September,
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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June 14, 'Remove Android Bloatware' by John Krout via Zoom

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

September 13, TBD

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Waymo Self-Driving Cars

by Jeff Wilkinson, President Sun City Summerlin Computer Club

On a recent visit to San Francisco, we noticed <u>Waymo</u> cars on many downtown streets. At first, we thought it was part of Google maps since Waymo is an Alphabet company, Google's parent company. But after seeing multiple Waymo cars together, we, you guessed it, Googled it and found out it was a ridesharing service.

The Waymo taxi service began in Phoenix shortly after mapping the greater Phoenix area was completed in October 2020. This driverless



"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 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 Keeping Mobile Devices Secure 3D Printing, ENABLE project **Internet Security and Privacy** Flash Drives-Not Just for Storage Features, Mac OS X & Windows

service was previously available only to research testers and onboard safety drivers. Now, it serves a 50-square-mile area in the Phoenix suburbs of Chandler, Tempe, and Mesa. With a huge investment at stake, the challenge is to reduce the amount of human interaction required to safely perform the service.

At this time, San Francisco is in Beta testing, initially offering free rides to select passengers in San Francisco via its <u>Trusted Tester</u> program. Waymo's fleet includes Toyota Priuses and hybrid Chrysler Pacificas, but, Waymo has partnered with <u>Jaguar</u> to deliver the world's first fully self-driven premium EV experience. We saw only these vehicles in San Francisco.

Because San Francisco's terrain is hilly, with dense streets and multiple obstacles from continuous construction activity, Waymo cars will have a safety driver on board. The team has been mapping the city since 2019, and the cars contain 5 LiDARs (<u>Light Detecting and Ranging</u>) and one surround-view camera on top of each vehicle. LiDARs provides a detailed, 3D map of the car's surroundings. It gives shape and depth to the objects, roads, buildings, and more—the data from these sensors is fed to a computer running Google's machine learning algorithm.

The human body has five senses, hearing, sight, smell, taste, and touch. We use these senses to navigate the world we live in. Some of these senses are detected with man-made sensors in self-driving cars. Cameras for sight, taking multiple photos to be compared with known objects using the computer algorithm. Cameras are used with object detection algorithms to classify all the things the car sees into usable data for the algorithm. The cameras are also placed for a 360-degree view and are adapted for identification in various light and climate conditions. Once the camera has gathered the data, an object detection algorithm, which involves computer vision and neural networks, is used to classify



the objects into labels like pedestrians, cars, signs, and more.

LiDAR is used to simulate the touching sense and provide range and distance information. The camera can rotate at hundreds of revolutions per minute and provide a 360-degree view and high-resolution information range. The vertical angle of detection allowing height measurement and the updating frequency are other important features. In addition, multiple channels with input from different laser beams provide higher quality data to the object detection algorithm.

APCUG, An International Association of Technology and Computer User Groups

https://apcug2.org/

Free, Virtual Technology Conferences, ONLINE presented by APCUG

The 2022 schedule **Saturdays:**

Dates not announced yet from 1-4 pm, EST

For Conference Descriptions & Registration Links, go to https://apcug2.org/category/virtual-tech-conference/

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-mactips-tricks-timesavers/_

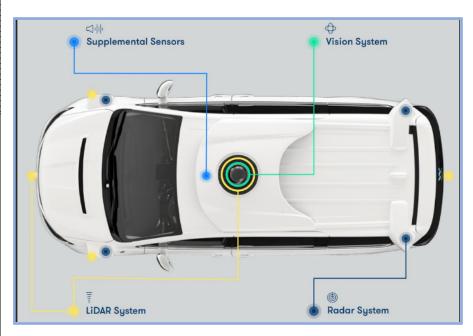
Penguin Platform (Linux):
https://apcug2.org/penguin-platform/

Chromebook Tips And Tricks: https://apcug2.org/chromebook-tips-and-tricks/ The Waymo driver uses the information it has gathered, along with its over 20 million miles driven in the real world, to predict where other objects (like pedestrians, cars, etc.) would go, how fast they would move, and the way they move.

It predicts *all* the possible paths each object may take in less than a second. With constant updates and corrections as the trip begins.

In addition to safety and navigation, self-driving vehicles must be power-and-fuel-efficient. Therefore, numerous sensors, actuators, application-specific circuit boards, and subsystems are installed in self-driven cars to manage system-level operations, power consumption, and fuel efficiency.

The voltage in the vehicle battery is crucial for the safety of the users and the vehicle's functionality and is constantly monitored. Autonomous



cars use milliohm meters and shunts feeding differential amplifiers to precisely measure the battery voltage drop.

Actuators, step motors, and solenoid valves in the electronic fuel injection system help improve fuel efficiency and reduce emissions and are also actively monitored and controlled.

Self-driving vehicles depend on sensors, actuators, and processors to make crucial decisions on the road, ensuring the safety and comfort of their users.

So, these self-driving Waymo Jaguars with the odd-looking spinning LiDAR and cameras are rolling technology hubs with dynamic inputs feeding various actuators and solenoids, which are constantly updated by feedback from even more sensors.

Initial tests yielded less than stellar feedback, but progress is steadily being made, which is not surprising given the complexity of the project.

Reprinted from the newsletter https://www.scscc.club, president.scscc@gmail.com.

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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

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

Linux & some Mac:

Carl Schmidtmann

unixgeek@faultline.com

Monitor Newsletter

The <u>Monitor</u> is published monthly by members of RCSI. Articles by our members may be reprinted by other user groups or nonprofits, without special permission. A courtesy copy may be emailed to the author or Monitor editor. Limited copies (probably in black and white) will be printed and available at our meetings.

Club Mailing Address

Rochester Computer Society, Inc PO Box 18516 Rochester, NY 14618

And the Scams Just Keep Coming

David Kretchmar, Computer Technician Sun City Summerlin Computer Club

If you're on the phone with some nice, polite person who asks you to download some software onto your computer that will allow them to remotely fix something that has been a problem, please think twice about it. Then do not do it. The chances are high that you are dealing with a scammer trying to get financial and personal data about you.

It is probably generally a very bad idea to give a stranger access to your computer. Yes, there are exceptions; I have allowed a Microsoft Tech to access my computer remotely to fix an Operating System installation problem. But anything short of that, such as reactivating a permanent version of Microsoft Office after a hard drive failure, did not require me to relinquish control of my computer to a stranger. Therefore, it is extremely unlikely that any issue you might be having would require you to give a stranger remote access to your computer.

My Experience

I was having problems installing AOL Gold on a client's new computer. A Google search led me to what appeared to be a legitimate AOL site, or at least it fooled me. I called the number and spoke to a nice, polite young lady, who might have been on the other side of the world. She explained that to fix the problem preventing AOL Gold from loading, I would have to give her access to my computer.

She asked me to download and install a program that would allow her to access my computer, which I foolishly did. She then sent me a code by text or email, which I had to enter to activate a remote session. Then for the first time, I wondered, why does she need to do that? I told her I was a computer tech who could probably follow her instructions, and she gave me an unsatisfactory answer. So, I terminated the call and uninstalled the remote access software.

Remote access programs such as TeamViewer, AnyDesk, LogMein, and dozens of others are legitimate programs, but they can be used for nefarious purposes. Scammers expertly reproduce the logos of legitimate software providers, such as AOL and McAfee. They can even spoof their email address, so an email appears to be coming from a legitimate company.

Fake antivirus email scam

Scammers might come at you via your email. For example, one message I have seen purports to be from McAfee or Norton, stating that your credit card will be charged for another year's subscription unless you contact them via a phone number or hotlink in the email. This message sounds authentic to many users, who might have had McAfee or Norton in the past, or who got a free trial that comes with many new computers.

When contacted, the scammer will state that for you to avoid additional charges, the scammer must remotely access your system. They will try to get you to download remote access software to give the

Tidbits of probably useless information

The highest point in Pennsylvania is lower than the lowest point in Colorado.

Nutmeg is extremely poisonous if injected intravenously.

If you have three quarters, four dimes, and four pennies, you have \$1.19. You also have the largest amount of money in coins without being able to make change for a dollar.

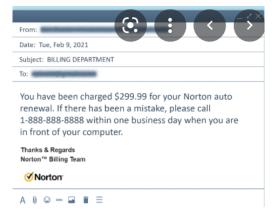
Only one person in two billion will live to be 116 or older.

There are 7 new people on the Internet every second.

The more wrinkled a brain gets, the bigger the surface of the cortext becomes. The human brain is especially wrinkled. If you look at a human brain, you only see about a third of its surface—the other two-thirds are hidden in its folds. If you could spread it out flat on a table, it would be 2500 square centimeters (a small tablecloth). A shrew's brain surface would be .8 square centimeters.

Polar bear fur isn't actually white. It's hollow and made of transparent keratin, with little to no pigmentation. When sunlight hits the bear, it undergoes a complex scattering process within the fur, with a small amount of light eventually being reflected. Since the sun's light is white, it's the color we perceive polar bears to be.

To many people, alligators and crocodiles look very much alike. They are two distinct species with many notable differences. While both have tongues, only the alligator can stick his out.



scammer access to your computer. Just say no. There is no legitimate reason someone needs to access your computer to remove a program.

Around the end of year holiday season, computer scammers and hackers seem to step up their attacks on computer systems. Users are especially vulnerable to

messages from vendors such as Amazon stating there is a problem with their order since many of us do order gifts from online vendors this time of the year. So don't let your guard down!

From the https://www.scscc.club newsletter, dkretch@gmail.com.

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

Desperately Seeking Something? Try These Free Research Tools

By Bob Rankin, www.askbobrankin.com a Translator for the Technology Impaired

Depending on your needs, the Web can be a gold mine, a cesspool, or both. So how can you find answers to your questions, and the helpful, authoritative information you need? Check out my list of the best free online reference and research tools. I promise, no April Fool's tricks in this issue!

Free Online Search (and Research) Tools

There are plenty of websites with dubious experts, opinionated blowhards, and others who would lead you in a particular direction that benefits them more than you. So where do you turn when you have a problem and you need to find reliable answers from true experts, researchers, and the recognized leaders in a particular area?

I've got a list of websites that I have personally found to meet those criteria. Most of them have been around for over a decade (or two), proving their worth by their longevity. Check out my long list of FREE online reference tools, covering more than a dozen areas of expertise.

General Reference Tools

In a library, if you don't know where to look for a reference book, you go to the Reference Librarian. On the Internet, if you don't know where to look for answers, you go to RefDesk.com. At first glance, the sheer amount of useful links on the Refdesk home page can be overwhelming. But it's really quite well organized and useful. I recommend that you click the dropdown next to REFERENCE DESK at the top right, and select an option from the list.

Windows & Android Tips

HTTPS vs. VPN: 5 Reasons You Do Need Both - HTTPS is

fantastic for keeping you safe, but it does have a few weaknesses which a VPN can cover. Explore why you need both a VPN and HTTPS combined with this article. HTTPS vs. VPN: 5 Reasons You Do Need Both (makeuseof.com)

HOW TO SILENCE SPAM CALLS WITHOUT **DOWNLOADING ANY APPS -**

"Our smartphones do many fabulous things, from calls (both voice and video) to texting, pictures, game playing and so much more. They nowadays tackle what most of our computers can. So, what do you do when you want to stay safe and protect yourself? That is simple. What you need to do is watch everything you download to your phone and who you contact. Read this article for ways to help stop the spam." How to silence spam calls without downloading any apps (komando.com)

9 EASY-TO-USE ARDUINO **MODULES FOR BEGINNERS -**

If you're new to Arduino, these beginner-friendly modules are great to start learning with.

9 Easy-to-Use Arduino Modules for Beginners (makeuseof.com)

POSTAGE STAMP-SIZED ROBOT CREATED USING RASPBERRY PI

MICROCONTROLLER - "The smallest Raspberry Pi robot yet, and unlikely to be beaten. The Raspberry Pi single-board computers have allowed the creation of small robots, but one avid maker has taken robot miniaturization to the extreme. Read more at Postage Stamp-Sized Robot Created Using Raspberry Pi Microcontroller | **PCMag**

Encyclopedia.com gives vou credible answers from published reference works. Enter your search words and it will search multiple encyclopedias, dictionaries and thesauruses. (Thesauri? Thesaurus Rex?)

The Britannica Online Encyclopedia is another very credible source. Today the home page has some April Fool's Day hoaxes, and a discussion of why bird poop is white. Who knows what tomorrow will bring?

At Dictionary.com, you can look up a word in either a dictionary or Roget's Thesaurus (to find synonyms and antonyms). The site also offers Word Facts 101, the Word of the Day, daily crosswords & word search puzzles, and a huge list of links to other online dictionaries, including hundreds of non-English ones.

At the Infoplease Homework Center, students will find useful information by subject area, develop better writing, note-taking and study skills, and search through previous questions and answers from other students.

WordReference offers free online translation dictionaries. Enter a word and it will first translate it into Spanish, French, Italian, German or Russian, then it will display the dictionary definition for that word in the chosen language. Need a synonym, antonym, or related word? Try this RhymeZone.

The <u>Farmers' Almanac</u> is filled with entertaining short stories, good cooking, fun, facts, forecasts, timely household tips, calendars for fishing and of course gardening. "Guessing the future since 1818."

The CIA World Factbook, published by the United States Central Intelligence Agency, has data on almost every country in the world, including maps, background, geography, people, government, economy, and military.

Medical Questions

WebMD is one of the leading medical reference websites. This authoritative website contains thousands of articles on medical conditions, diseases and how to stay healthy.

The Mayo Clinic's Symptom Checker prompts you to choose a symptom, enter related factors, and view possible causes. (I heard one comedian refer to this as YouProbablyHaveCancer.org)

MedlinePlus is a service of the National Library of Medicine (NLM), the world's largest medical library. You'll find information on health, wellness, disorders, prescription drugs, over-the-counter medicines, supplements, and articles about diseases, symptoms, tests, and treatments.

Business and Financial Research

Hoover's Online provides company capsules and profiles that give comprehensive company, industry, and market intelligence to investors and business professionals. (Insert vacuum cleaner joke here.)

EDGAR - The SEC requires public companies to file registration statements, periodic reports, and other forms electronically through EDGAR. Now you can access and download this information for free.

Scam Alerts

www.usa.gov/common-scamsfrauds

Government Grant Scams

Government grant scammers try to get your money by guaranteeing you a grant for costs like college or home repairs. They ask for your checking account information. With it, they say they will "deposit the grant money into your account" or withdraw a "one-time processing fee."

In reality, government grants are rarely awarded to individuals. They usually go to state and local governments, universities, and other organizations. The money is awarded to help pay for research and projects that will benefit the public.

Lottery and Sweepstakes Scams

Prize scammers try to get your money or personal information through fake lotteries, sweepstakes, or other contests. Many claim that you've won a prize but must pay a fee to collect it. Others require you to provide personal information to enter a "contest." These scams may reach you by postal mail, email, phone call, robocall, or text message.

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.

<u>Zack's Investment Research</u> has tools that enable individuals to research, select and track their investments more effectively. Company news, profiles, stock prices and more.

Weather

In addition to local weather maps and forecasts for thousands of cities around the world, <u>The Weather Channel</u> website offers many other useful features such as the free Desktop Weather software for Windows, Inbox Weather (e-mails you the forecast daily) Pollen Reports, Air Quality Forecast, and the Interstate Forecast planner.

For the weather junkies, <u>Weather Underground</u> has everything you'd expect from a weather site, including yesterday's forecast.

Check the <u>BBC Weather Centre</u> for weather forecasts for the UK and cities around the world.

Movies

The <u>Internet Movie Database</u> (IMDB) lets you search for a movie or video by its title, and tells you everything you could ever want to know about that movie and its actors.

Ever wonder if a movie is appropriate for your family? <u>ScreenIt</u> has detailed reviews for movies and videos. You'll know just how much language, violence, sex, and other potentially offensive material you'll be exposed to.

Rotten Tomatoes is a site for both casual movie-goers and film buffs alike. Millions each month use Rotten Tomatoes as a dependable resource and objective coverage of movies and videos. With more than 100,000 titles and 360,000 review links in its ever-growing database, Rotten Tomatoes offers a fun and informative way to discover the critical reaction on movies from the nation's top print and online film critics, neatly summarized via the TomatoMeter.

Music and Lyrics Research

Try <u>Lyrics.com</u> if you want a searchable database of song lyrics covering many different genres.

<u>Kiss This Guy</u> is a website devoted to misheard or misunderstood lyrics. Finally, you can find out why Manfred Mann had a boulder on his shoulder in the song "Blinded by the Light."

US Government

Visit <u>Congress.gov</u> and find up-to-date information on who's really saying what on Capitol Hill. This site, formerly known as THOMAS, is a service of the U.S. Congress to make legislative information publicly available. It contains full text of legislation (both House and Senate bills searchable by keyword or by bill number) and full text of the Congressional Record. No spin, bias, or sound bytes here... Just the raw data from which you can draw your own conclusions.

<u>USA.gov</u> is the U.S. government's official web portal, a guide to finding government info and websites on a wide variety of topics, including Benefits and Grants, Consumer Guides, Environment, Energy, and

Interesting Internet Finds

By Steve Costello scostello@sefcug.com

Do Random Words Make Better Passwords?

https://askleo.com/do-random-words-make-better-passwords/

In this post, Leo Notenboom explains why using three or more random words can be better for making passwords than the current method of long strings of random characters. Caveats to the random word method are also presented. Check it out and find out if random words work out better for you.

How To Charge Laptop With HDMI?

https://www.techtricksworld.com/how-to-charge-laptop-with-hdmi/

I did not even know it was possible to charge a laptop with HDMI until I read this post. So now, if I forget my laptop charger on vacation, I have other solutions than ordering a new one from Amazon again.

What's The Reason For Free Software?

https://askbobrankin.com/whats_t he_reason_for_free_software.html

I used to get this question when moderating the BRCS Freeware SIG. (Some files from the SIG meetings are still available at https://app.box.com/v/brcs-freewaresig and are probably still useful.) Bob Rankin provides a detailed answer to the question in this post.

What Is DNS-Over-HTTPS and How Does It Work? https://www.makeuseof.com/whatis-dns-over-https/

This post explains what DNS-Over-HTTPS is, how it works, the advantages and the disadvantages. Agriculture, Health and Nutrition, Money and Taxes, Public Safety and Law, Science and Technology, and Voting and Elections.

Language Translation

Google Translate does computer-assisted translations from English to Spanish, Chinese, French, German, Italian, Japanese, Korean, Portuguese, Russian -- and back again, sort of. In addition to entering or pasting your own text, you can select a document to translate. Supported formats include txt, rtf, doc, pdf, ppt, and xls. Over 100 languages are supported, and it does a pretty good job of figuring out what the input language is, when you're not sure of the starting point. You can click an icon to hear the phrase spoken in the target language. Microsoft's Bing Translator is a similar service, covering about 60 languages.

Maps, Topography and Astronomy

Google Maps will help you find your way from point A to point B, providing detailed turn-by-turn directions. Google Earth lets you virtually fly to any point on Earth and view streets, houses, buildings, and terrain, from satellite imagery. The built-in Google Sky component lets you zoom out into outer space to view planets, stars, constellations and galaxies.

Microsoft's <u>WorldWide Telescope</u> turns your computer into a telescope. This jaw-droppingly cool tool blends images and data from ground and space-based telescopes to allow for seamless panning and zooming across the night sky. You can also take guided tours, narrated by astronomers, featuring interesting places in the sky.

<u>CitySearch</u> helps you explore city life, from Las Vegas hotels to New York restaurants, Chicago events to Seattle coffee houses. Find recommendations, ratings, reviews, tips and more.

Genealogy

Cyndi's List is a comprehensive index to over 100,000 genealogical resources on the Internet. You'll find a list of links that point you to genealogical research resources in many different countries, all categorized & cross-referenced. It's like a "card catalog" to the genealogical collection in the immense library that is the Internet. Over 1000 new links are added each month! Find more genealogy resources in my article Genealogy Research Online.

Air Travel

Are you meeting a friend at the airport? Track a flight, with this graphical real-time monitor that shows the flight path on a map, along with the aircraft's altitude, speed and estimated arrival time. Try the FlightAware Flight Tracker.

My article <u>Here's How to Get The Lowest Airfares Online</u> will point you to some specialized online search tools, and more tips and tools for flyers.

Miscellaneous Research Tools

BIBLE SEARCH - <u>Bible Gateway</u> is a tool for reading and searching the Bible online, covering over 100 languages and translations. It provides

Around the World

The United Nations has set ending hunger, achieving food security and improved nutrition, and promoting sustainable agriculture as the second of its 17 Sustainable Development Goals (SDGs) for the year 2030.

To achieve these objectives we will need to address a host of issues, from gender parity and aging populations to skills development and global warming. Agriculture sectors will have to become more productive by adopting efficient business models and forging public-private partnerships. And they need to become sustainable by reducing greenhouse gas emissions, water use and waste.

The risks if we fail? Malnutrition, hunger and even conflict.

Why should growth be inclusive?

The push for economic growth in recent decades has led to substantial increases in wealth for large numbers of people across the globe. But despite huge gains in global economic output, there is evidence that our current social, political and economic systems are exacerbating inequalities, rather than reducing them.

A growing body of research also suggests that rising income inequality is the cause of economic and social ills, ranging from low consumption to social and political unrest, and is damaging to our future economic well-being.

In order to boost growth and counter the slowdown in emerging markets, we need to step up efforts around the world to accelerate economic activity and to ensure that its benefits reach everybody in society.

advanced searching capabilities, which allow readers to find and compare passages based on keywords, phrases, or scripture reference.

FINANCIAL AID - FinAid is the most comprehensive collection of information about student financial aid on the web. FinAid is free and has a stellar reputation in the educational community as the best Web site of its kind. Make it your first stop on the Web when looking for ways to finance an education.

HOUSE VALUES - <u>Zillow.com</u> offers free automated house valuations on more than 80 million homes across the United States. You can see the estimated value of your house, your neighbor's house, or just about any other home in the country -- whether it's for sale or not. Zillow pulls information from public real estate records, tax rolls and other sources to compute a house value. Zillow also offers a forum where you can chat with pros, as well as other home buyers and sellers.

PEOPLE FINDERS - Need to find someone's phone number, address, or other personal info? Check out <u>FastPeopleSearch</u> and search by name, phone number, or address. In the past I've recommended WhitePages.com, but I've found this site offers more information, fewer ads, and doesn't constantly try to sell "premium" services.

SPECIALIZED GOOGLE SEARCHES - Just visit Google and type in a phone number, stock symbol, or Fedex tracking number, and see what happens. Learn more about Google's secret search tools in my artcile Here's How to Strengthen Your Google Fu.

End of Article # #

* * * * * 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.

These astronomers want to tell aliens where Earth is — and not everyone is happy about it

by Chris Impey

In the coming months, two teams of astronomers are going to send messages into space

If a person is lost in the wilderness, they have two options. They can search for civilization, or they could make themselves easy to spot by building a fire or writing HELP in big letters. For scientists interested in the question of whether intelligent aliens exist, the options are much the same.



* * Jokes Stolen from Everywhere * *

Roseanne Barr jokes and quotes

As a housewife, I feel that if the kids are still alive when my husband gets home from work, then hey, I've done my job.

Women complain about PMS, but I think of it as the only time of the month when I can be myself.

I consider myself to be a pretty good judge of people... that's why I don't like any of them.

Chili represents your three stages of matter: solid, liquid, and eventually gas.

Since I had my gastric bypass surgery in 1998, I eat like a bird. Unfortunately, that bird is a California condor.

Beauty comes in all sizes, not just size 5.

A guy is a lump like a doughnut. So, first you gotta get rid of all the stuff his mom did to him. And then you gotta get rid of all that macho crap that they pick up from beer commercials. And then there's my personal favorite, the male ego.

I hate the word housewife; I don't like the word home-maker either. I want to be called Domestic Goddess.

My husband and I didn't sign a pre-nuptial agreement. We signed a mutual suicide pact.

The world makes you into a bitch, no matter how quietly you go, so you may as well go kicking and screaming.

Women are cursed, and men are the proof.

If you spend all your time worrying about dying, living isn't going to be much fun.

For over 70 years, <u>astronomers</u> have been scanning for radio or optical signals from other civilizations in the search for extraterrestrial intelligence, called <u>SETI</u>. Most scientists are confident that life exists on many of the <u>300 million potentially habitable worlds</u> in the Milky Way galaxy. Astronomers also think there is a <u>decent chance some life forms have developed intelligence and technology</u>. But no signals from another civilization have ever been detected, a mystery that is called "<u>The Great Silence</u>."

While SETI has long been a part of mainstream science, <u>METI</u>, or messaging extraterrestrial intelligence, has been less common. In the coming months, two teams of astronomers are going to send messages into <u>space</u> in an attempt to <u>communicate with any intelligent</u> aliens who may be out there listening.

These efforts are like building a big bonfire in the woods and hoping someone finds you. But some people question whether it is wise to do this at all.

One of these new messages will be sent from the <u>world's largest radio telescope</u>, in China, sometime in 2023. The telescope, with a 1,640-foot (500-meter) diameter, will beam a series of radio pulses over a broad swath of sky. These on-off pulses are like the 1s and 0s of digital information.

The other attempt is targeting only a single star, but with the potential for a much quicker reply. On Oct. 4, 2022, a team from the Goonhilly Satellite Earth Station in England will beam a message toward the star <u>TRAPPIST-1</u>. This star has seven planets, three of which <u>are Earth-like worlds in the so-called "Goldilocks zone</u>" – meaning they could be home to liquid and potentially life, too. TRAPPIST-1 is just 39 light-years away, so it could take as few as 78 years for intelligent life to receive the message and Earth to get the reply

But there is also a much deeper question. If you are lost in the woods, getting found is obviously a good thing. When it comes to whether humanity should be broadcasting a message to aliens, the answer is much less clear-cut.

Before he died, iconic physicist <u>Stephen Hawking was outspoken about the danger</u> of contacting aliens with superior technology. He argued that they could be malign and if given Earth's location, might destroy humanity. <u>Others see no extra risk</u>, since a truly advanced civilization would already know of our existence.

You can read the whole article at This article by <u>Chris Impey</u>, University Distinguished Professor of Astronomy, <u>University of Arizona</u> is republished from <u>The Conversation</u> under a Creative Commons license.

Read the original article.

Odds and Ends

Molecular Robots Swarm to Deliver Cargo

Researchers at Hokkaido University in Japan created molecular robots that can employ swarm behaviors to move and release small cargoes. The robots can be controlled using light, and they consist of biological components, including DNA, microtubules, which are a cytoskeletal component, and kinesin, which is a motor protein that interacts with microtubule filaments. The technology could have significant potential as a drug delivery mechanism, and may lead to a variety of future nanotechnological medical applications. While the technology is currently in its infancy, if the researchers can make the technique work inside the body, then micro robot swarms could conceivably accomplish a variety of tasks minimally invasively, from tackling tumors to delivering drugs.

A single bee isn't particularly powerful, but a swarm of them can make the toughest of us start running. This is the philosophy behind this newest technology, which harnesses the power of micro robot swarms and is bio-inspired by the behaviors of cooperative animals. Robot swarms are currently under investigation for a variety of tasks, including moving items or forming complex structures. A swarm can respond to evolving situations and perform complex tasks that are far beyond the capabilities of a single robot.

Read more at
https://www.medgadget.com/2022/04/molecular-robots-swarm-to-deliver-cargo.html.

From seawater to drinking water, with the push of a button

Researchers build a portable desalination unit that generates clear, clean drinking water without the need for filters or high-pressure pumps.

MIT researchers have developed a portable desalination unit, weighing less than 10 kilograms, that can remove particles and salts to generate drinking water. The suitcase-sized device, which requires less power to operate than a cell phone charger, can also be driven by a small, portable solar panel, which can be purchased online for around \$50. It automatically generates drinking water that exceeds World Health Organization quality standards. The technology is packaged into a user-friendly device that runs with the push of one button.

Unlike other portable desalination units that require water to pass through filters, this device utilizes electrical power to remove particles from drinking water. Eliminating the need for replacement filters greatly reduces the long-term maintenance requirements.

Commercially available portable desalination units typically require high-pressure pumps to push water through filters, which are very difficult to miniaturize without compromising the energy-efficiency of the device, explains Yoon.

Instead, their unit relies on a technique called <u>ion concentration</u> <u>polarization</u> (ICP), which was pioneered by Han's group more than 10 years ago. Rather than filtering water, the ICP process applies an electrical field to membranes placed above and below a channel of water. The membranes repel positively or negatively charged particles — including salt molecules, bacteria, and viruses — as they flow past. The charged particles are funneled into a second stream of water that is eventually discharged. The process removes both dissolved and suspended solids, allowing clean water to pass through the channel. Since it only requires a low-pressure pump, ICP uses less energy than other techniques.

Read it all and watch the video at https://news.mit.edu/2022/portable-desalination-drinking-water-0428.

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

Rochester 'a crucible of innovation' says NSF director during campus visit

April 12, 2022

During a visit to the <u>University of Rochester</u>, National Science Foundation director Sethuraman Panchanathan said the University is a "phenomenal place of innovation," noting Rochester's crucial role in advancing scientific research.

Panchanathan, along with US Senator Charles Schumer and US Representative Joseph Morelle, visited Rochester on Monday. As part of the visit, Panchanathan met with researchers and students and toured several of the University's facilities, including the <u>Laboratory for Laser</u>

<u>Energetics</u>, to learn more about how NSF investments at the University are pushing the frontiers of science and helping drive America's technological leadership.

"This is the number one place. Why? Because of the ideas, innovation, talent, and the environment all coming together," Panchanathan said. "This is a crucible of innovation, and I saw that firsthand today."

He continued, "It was just unbelievable watching the amazing ideas, the amazing talent, the amazing impact, the amazing innovation that is coming out through every one of those students, postdocs and faculty members, and researchers."

In addressing a group in Goergen Hall on the River Campus, Schumer discussed pending US competitiveness legislation currently being considered by Congress. The Senate's US Innovation and Competition Act and the House's America COMPETES Act would make significant investments in federal research and development, entrepreneurship, STEM education and workforce training, and domestic manufacturing. Schumer and Morelle are pushing federal officials to invest in Rochester and position the Finger Lakes region as a next-generation growth center.

Schumer said the acts would "significantly scale support for research hubs like Rochester to ensure the nation remains on the cutting edge of new innovation" and that the investments would "supercharge work by the regions' key economic drivers, including UR and RIT, two of the premier science universities in the entire nation."

Read it at https://www.rochester.edu/newscenter/national-science-foundation-panchanathan-rochester-crucible-of-innovation-518382/.

RCSI

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

Sunnking Recycling Events for our area,

https://www.sunnking.com/

Register at the links below, ticket is REQUIRED for entry

Limit of 4 CRT (tube) monitors or televisions per vehicle

June 4, 2022, Xerox Corporation (Bldg 147) off Panama Road, Webster, NY

Register for Webster, https://www.sunnking.com/events/webster-06-04-22

June 25, 2022, Genesee County Department of Social Services, 5130 East Main Street Road, Batavia, NY Register for Batavia, https://www.sunnking.com/events/batavia-06-25-22

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 Schmidtmann, 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**