Our Club

RCSI is a nonprofit 501(c)(3) group open for membership to anyone interested in computers and related technology. 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.

Program Meetings

No admission fee for non-members. Everyone is welcome! Second Tuesday of every month, except 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

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 *Monitor* is published monthly by members of RCSI. Articles by our members may be reprinted by other user groups or nonprofits, without special permission, provided they are unaltered. A courtesy copy may be emailed to our author or Monitor editor.

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

M NIT R

Tuesday, June 9, 'How to Avoid the Latest Scams Circulating on the Web, Email and Phone' by Arpad Kovacs

Tuesday, July 14, TBD

In This Issue

How Has AI Changed Your Life?

By Stephen D. Ambrosini, CLU ChFC
20/20 Financial Advisers of Cardiff by the Sea
LLCsambrosini@2020fa.com

When I find myself at social events, I like to ask a question to start a conversation with those around me. The question is: " Tell me how Artificial Intelligence (AI) has changed your life. What are your experiences?" Then I sit back and listen.

I started asking this question after attending a few seminars and reading books about the topic. Everyone has a story. Recently I asked

"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

Sound Bytes is the longest running computer call-in show in the known universe.

Free copies of the RCSI **'Monitor'** newsletter can be found in the following computer stores: Microworx, TSC Electronics, Pod Computers, and Just Solutions. Digital copies may be obtained from **www.rcsi.org** or my **Pcloud** storage at **https://tinyurl.com/tonydel-rcsi** (*this link works on PDF version only*). Also includes presentation slides and articles too large for this newsletter.

Some Past Presentations:
Cut the Cord, Streaming Services
Autonomous Cars and Robots
Open Source and Free Software
Protecting Your Identity
Keeping Mobile Devices Secure
3D Printing, ENABLE project
Flash Drives-Not Just for Storage
Features, Mac OS X & Windows
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

my dental hygienist that question. She immediately became very tense and anxious. She denied it was affecting her at first, but after a few moments, she proceeded to tell me about a few new devices that will clean your teeth. They're available on Amazon of course and are Bluetooth compatible. You charge this dental retainer type device, then you pop it in your mouth. Fifteen minutes later, your teeth are cleaned. That's one less dental visit.

This week I asked a journeyman electrician how his life is changing. His answer: homes and offices being built today have less copper wire. It's not needed anymore since everything is wireless. They still have to run some copper to the lights, but nowhere else. That's a huge savings in new home construction. Also, the power companies are putting in controls that let them dim our lights when needed. So instead of black or brownouts, the power company can dim our lights from their location to save power.

From the books and articles I've read, I came across the name Jim Dator, an author and Professor at the University of Hawaii at Manoa. One of the Dator Laws is: "Any useful idea about the future should appear to be ridiculous." Think about that for a moment. Things that we mocked, saw on TV, laughed at in movies are now modern-day. Star Trek communicators, Dick Tracy watches, "Back to the Future" hoverboards, "Beam me up, Scotty", it's here. They seemed ridiculous at the time, yet they are as real as the Apple Watch you're wearing.

If it's scary, and it is, it's because change is hard. It's rarely accepted or appreciated. We're all stuck in our ways and want to leave it like that. However, we must accept the change because it's happening whether we want it or not. The banks didn't ask us if we want to now withdraw money from a machine and replace the friendly teller. They just did it, and we adjusted. As a result, many of us haven't been inside a bank for years. This week I needed to refer a friend to a personal banker. I couldn't, I don't have one. Those days of walking in, saying hi, asking about the kids and work, are gone. AI has taken that away. And you know, that's okay. We all have adjusted very well to that change.

So, let's not be afraid of these changes. Let's instead open up our eyes to see what's coming. How can we benefit from them? How will it improve my life?

Example: the BMW dealership contacted me recently because my car sent them a message informing them that an oil change is overdue. Now I'll be bringing the car in for service. That's a good thing, it's extending the life of the vehicle.

From the Drive Light, the Under the Computer Hood UG newsletter.

Final 'Hard Copy' Newsletter Printing
The final *hard copies* of the 'Monitor' newsletter, currently being distributed to some of the computer stores, will end with the June issue. New digital copies will still be posted to the club website.

Evolution of AI: Past, Present, Future

Christina Aguis, Feb 2, 2019

The History of Artificial Intelligence

Although the concept of artificial intelligence has been around for centuries it wasn't until the 1950's where the true possibility of it was explored. A generation of scientists, mathematicians and philosophers all had the concept of AI but it wasn't until one British Polymath, Alan Turing, suggested that if humans use available information, as well as reason, to solve problems and make decisions — then why can't machines do the same thing? Although Turing outlined machines and how to test their intelligence in his paper *Computing Machinery and Intelligence* in 1950 — his findings did not advance.

The main halt in growth was the problem of computers. Before any more growth could happen they needed to change fundamentally — computers could execute commands, but they could not store them. Funding was also an issue up until 1974.

By 1974 computers flourished. They were now faster, more affordable and able to store more information. Early demonstrations such as Allen Newell and Herbert Simon's General Problem Solver and Joseph Weizenbaum's ELIZA, which was funded by Research and Development Corporation (RAND), showed promise toward the goals of problem-solving and the interpretations of spoken language in machines, and yet there was still a long way to go before machines could think abstractly, self-recognize and achieve natural language processing.

In the 1980s AI research fired back up with an expansion of funds and algorithmic tools. John Hopfield and David Rumelhart popularized "deep learning" techniques which allowed computers to learn using experience. On the other hand, Edward Feigenbaum introduced expert systems which mimicked decision making processes of a human expert. But it was not until the 2000's that many of the landmark goals were achieved and AI thrived despite lack of government funds and public attention.

Today's AI Research

In today's day, AI research is constant and continues to grow. Over the last five years AI research has grown by 12.9% annually worldwide, according to technology writer Alice Bonasio.

Within the next four years China is predicted to become the biggest global source of artificial intelligence, taking over the United States' second lead in 2004 — and it is quickly closing in on Europe's number one spot.

Europe is the largest and most diverse region with high levels on international collaboration within the field of artificial intelligence research. After China and the United States, India is the third largest country in terms of AI research output.

When it comes to specifics, there are seven distinct research areas with limitations on AI ethics research.
· Search and Optimization

· Fuzzy Systems
· Natural Language Processing and Knowledge Representation
· Computer Vision
· Machine Learning and Probabilistic Reasoning
· Planning and Decision Making
· Neural Networks

Neural networks, machine learning, and probabilistic reasoning and computer vision show the largest volume of research growth.

Present Effects of AI

There is so much that artificial intelligence is being used for and so much more potential that it is hard to picture our future without help it — especially when it comes to business.

From workflow management tools to trend predictions and even the way brands purchase ads, machine learning technologies are driving increases in productivity like never before.

Artificial Intelligence can collect and organize large amounts of information to make insights and guesses that are beyond the human capabilities of manual processing. It also increases organizational efficiencies yet reduces the likelihood of a mistake and detected irregular patterns, like spam and fraud, to warn business in real time about a suspicious activity — among many other things. AI is said to reduce costs in many ways — for example, "training" machines to handle incoming customer support calls and replacing many jobs in that way. It's also known that if your business doesn't use AI it's probably falling behind competitively.

AI has become so important and advanced that a Japanese Venture Capital firm made history by being the first company to nominate an AI Board Member for its capabilities to predict market trends faster than a human.

Artificial intelligence will be and is becoming a commonplace in every aspect of life — like the future of self-driving cars, more accurate weather predictions, or earlier health diagnosis, just to name a few.

A Smarter Future

It has been said that we are on the cusp of the Fourth Industrial Revolution — a revolution that is completely different than the previous three. From steam and water power, electricity and assembly lines, and computerization to now challenging the ideas about what it means to be human.

According to Forbes, the Fourth Industrial Revolution "describes the exponential changes to the way we live, work and relate to one another due to the adoption of cyber-physical systems, Internet of Things and the Internet of Systems."

Smarter technologies in our factories and workplaces and connected machines that will interact, visualize the entire production chain and make decisions autonomously is just a couple of the ways that the Industrial Revolution will cause advancements in business. One of the greatest promises that the Fourth Industrial Revolution brings is the

Tidbits of probably useless information

Albert Einstein had a smaller than average size brain.

A giraffe cleans its ear out with its 21 inch long tongue.

The first couple to be shown in bed together on prime time television were Fred and Wilma Flintstone.

Every day more money is printed for Monopoly than for the US Treasury.

It is possible to lead a cow upstairs but not downstairs.

The smartest dogs are: 1) Scottish Border Collie; 2) Poodle; 3) Golden Retriever.

The dumbest dog is an Afghan hound.

The Hawaiian alphabet has 12 letters. The original alphabet included five vowels and seven consonants: A, E, I, O, U, H, K, L, M, N, P, W, and seven diphthongs: AE, AI, AO, AU, EI, EU, OU. In addition, the letters F, G, S, Y, and Z were used to spell foreign words.

City with the most Rolls Royces per capita: Hong Kong

State with the highest percentage of people who walk to work: Alaska

Percentage of Africa that is wilderness: 28%.

Percentage of North America that is wilderness: 38%.

Barbie's measurements if she were life size: 39-23-33.

potential to improve the quality of life for the world's population and raise income levels. Our workplaces and organizations are becoming "smarter" and more efficient as machines, humans are starting to work together, and we use connected devices to enhance our supply chains and warehouses.

According to Gigabit Magazine, there are seven stages that will create a smarter world with AI:

1. Rule-Based Systems — domestic applications and RPA software that surrounds us everywhere, every day.

2. Context Awareness and Retention — algorithms that build up a body of information that is used and updated by machines. For example, chatbots and roboadvisors.

3. Domain Specific Expertise — machines that can develop expertise in a specific field that extends beyond the capability of humans because of all the informational access they can quickly get to, to reach a decision.

4. Reasoning Machines — these algorithms have a "theory of mind," some ability to attribute mental states to themselves and others. They have a sense of beliefs, intentions, knowledge, and are aware of how their own logic works. Hence, they have the capacity to reason, negotiate, and interact with humans and other machines.

5. Self Aware Systems — the goal for those working in the AI field is to create and develop systems with human-like intelligence. There is no such evidence of that today, but some say that there will be in as little as five years while others believe we may never achieve that level of intelligence.

6. Artificial super intelligence — developing AI algorithms that are capable of outperforming the smartest of humans in every single domain.

7. Singularity and Transcendence — a development path enabled by AI that could lead to a massive expansion of human capability, where one day we might be sufficiently augmented and enhanced such that humans could connect their brains to each other and to a future successor of the current Internet.

Envisioning AI in the Next 20 Years
2020–2025

· Between 70% and 90% of all initial customer interactions are likely to be conducted or managed by AI
· Product development in a range of sectors from fashion items and consumer goods to manufacturing equipment could increasingly be undertaken and tested by AI
· Individuals will be able to define and design the personalised products and services they require in sectors ranging from travel through to banking, savings, and insurance
· The technology is likely to be deployed across all government agencies and legal systems — with only the most complex cases requiring a human judge and full court proceedings

Jere's Tech Tips
By Jere Minich, Apcug Advisor,
Region 5 (AL, FL, GA, SC)

WHAT IS CELL PHONE CONTACT TRACING? – Google and Apple just released software to let developers create contact-tracing apps and fight COVID-19. What does this do? We can explain.

Stopping COVID-19 before there's a vaccine means preventing sick people from spreading it. While total lockdowns are one way to do that, South Korea and China have dramatically reduced infections in part by contact tracing, the practice of tracking those with whom infected people have come into contact.

Go to this PC Magazine article and read about how it will work.
https://bit.ly/2KRvoP2

15 BEST ANDROID MULTIPLAYER GAMES – Android gaming has been steadily getting better. Before, we had simple puzzle games and we could invite our Facebook contacts to be our friends in games. Multiplayer games used to mean just leaderboards. There are now a ton of games that support actual multiplayer play, including real time co-op or PvP. In fact, most games these days have some sort of multiplayer element in them. If you're looking for something to play with your friends, here are the best Android multiplayer games!

Go to this Android Authority web site and review the games.
https://bit.ly/3536iWQ

· Autonomous vehicles will start appearing in many cities across the world
· Our intelligent assistants could now be managing large parts of our lives from travel planning through to compiling the information we need prior to a meeting.

2026–2040

· Globally approved, smart crypto tokens may be accepted alongside fiat currencies as we edge towards a single global medium of exchange
· Artificial intelligence is likely to have penetrated every commercial sector
· The evolution of AI could see the emergence of a wide range of fully automated DAO businesses including banks, travel agents, and insurance companies
· Scientific breakthroughs could enable us to develop artificial animal and ecosystem intelligence
· The emergence of self-aware and self-replicating software systems and robots
· There is a reasonable possibility of achieving Artificial General Intelligence
· There is a small chance of creating 'Artificial Super Intelligence'
· The singularity remains an unlikely possibility in this time frame.

Editor's Note: I printed this article, without getting permission.
www.medium.com/datadriveninvestor/evolution-of-ai-past-present-future-6f995d5f964a

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

Cable or Air? – What's Your Choice?
By Phil Sorrentino, Contributing Writer
The Computer Club

Most TVs default to cable, so if you get your TV programming via a cable company like Spectrum or Frontier, you don't have to answer this question. But if you want to get "broadcast TV," you will have to select "air" when given the choice. (Your specific television may use the term "broadcast" or over the air (OTA) instead of "air".)

Way back in the 30's/40's, when television was being developed, the inventors had to establish the bandwidth for a broadcast television channel. Based on the video and audio information needed to be packed into the signal, the decision was made to allocate 6 MHz to a broadcast channel. So every television broadcast channel signal was designed to take up 6 MHz of bandwidth. Remember, that was in the prehistoric days of analog television signals. We are now in the digital television age, as evidenced by the many nice slim, large screen TVs around us. If you'll remember, this transition took place way back in 2009, June 12, 2009, to be exact. That was the day our old television sets could no longer bring us entertainment and information unless we acquired an analog to digital converter box.

Scam Alerts

Paycheck Protection Plan recipients are the latest target for scammers and fraud.
If you've received an email telling you that your small business may qualify for government-backed loans via the Paycheck Protection Program (PPP), delete it right away. A new scam is in town, and it's harming small business owners left and right across the country.

According to a bulletin posted by First Interstate Bank, PPP recipients are one of the groups being targeted by a new scam campaign that may steal your personal and financial information at one of the worst times imaginable.

Both PPP recipients and non-applicants are being targeted, but the methods of attack are the same nonetheless. These emails take the form of a message from the government's Small Business Association, which explains that you qualify for a loan and must apply or sign documents to get approved. Unfortunately, these emails are nothing more than fakes, and signing the documents they contain may lead to devastating consequences like stolen identities, fraud and data breaches.

Identity Theft, Phishing and Pharming
Scammers gain access to your confidential information, like social security numbers and date of birth, and then use it to apply for credit cards, loans and financial accounts. Typically, the victim receives an email that appears to be from a credible, real bank or credit card company, with links to a website and a request to update account information. But the website and email are fakes, made to look like the real website.

The government even gave us the opportunity to purchase two of these devices for $35 each, in advance of the transition, so we could make the transition and not miss a single television show. (I only had one TV at the time, so I only purchased one of these devices, and believe it or not, I still have it. I used it for a while until I stepped into the digital television age. Anybody still need a converter box?)

Now we have digital television, but we still have the 6 MHz television channel bandwidth. The bandwidth of a signal is related to the modulation scheme used to create the modulated signal. The modulated signal must fit within the bandwidth allocated, otherwise the Federal Communications Commission (FCC) will be very unhappy. (First, just a quick technical explanation. Modulation is the process of putting a signal (video or audio) on a carrier frequency signal. The carrier frequency signal (think WCTQ is on 96.3 MHz) is the frequency used to carry the signal from the transmitting antenna to the receiving antenna. Then at the receiving television set, the modulated signal is demodulated to recover the original signal. End of explanation.)

So when the transition to digital was being explored, in the latter days of the last millennium and the early days of this millennium, the broadcast industry and the cable TV industry had to decide what type of modulation scheme to use with the new digital television signals. By the way, here's a nearly useless piece of trivia. The analog television modulation scheme was called Vestigial Sideband modulation). When TV was invented there was only one industry, that was the broadcast industry, but now there are two ways of getting television signals to customers, over the air, and over the cable. Due to the differences in transmitting signals over the air and transmitting signals over a cable, the two industries decided on two different modulation schemes. Here are two other pieces of trivia. The Over the Air signal is modulated using an Eight Level Vestigial Sideband (8VSB) modulation technique and the cable signal is modulated using a Quadrature Amplitude Modulation (QAM) technique.

The meaning of each of these is not germane to this discussion except for the fact that they are different. And it is that fact that forces the television manufacturer to include both types of de-modulators on the television. So, all digital televisions are capable of using either signal. Most, if not all, are defaulted to use the cable signal, probably because nowadays most people receive their television from a cable TV provider rather than over the air. So, if you are a cord cutter, you will have to go into the settings of your TV and find the location where "Air" or "Cable" is chosen. Once you have made the "Air" choice, you will have to let the TV scan for all of the channels in your area. Once scanned, your TV will be set up for your local, over the air, television channels. (A cord cutter is someone who has decided to stop receiving their television entertainment from their cable provider, which means they no longer get cable channels. They receive over the air television channels using an antenna, and they stream entertainment from such providers as Netflix, Amazon Prime, and Hulu, over their Internet connection. Streaming services

Some Interesting Websites and Internet Finds

by Steve Costello
scostello@sefcug.com

How to Make Gmail Your Default Windows 10 Email Client

https://www.techjunkie.com/gmail-default-windows-10-email-client/
I know I don't want Outlook to be my default email on Windows 10, so as soon as I saw this post, I followed the instructions and can now use my Gmail account.

The Wonders Of Wordpad – Cyn Mackley

https://cynmackley.com/2020/01/15/the-wonders-of-wordpad/
You don't have to go out and buy a word processing program or learn a whole office suite just to write simple documents if you have a Windows operating system. The Wordpad program is built right in. Cyn explains some of the basics in this post.

What Is Creative Commons & Explanation Of Each License

https://www.online-tech-tips.com/computer-tips/what-is-creative-commons-explanation-of-each-license/
Every once in a while I like to remind anyone who blogs, edits a newsletter, or wants to use information or photos, that there is a legal way to do so. There is a great amount of good information and images available for use under Creative Commons licensing. Check out this post to learn more.

require a subscription, and there are some streaming providers that include cable channels.)

Now we still have a 6 MHz broadcast channel but, because we have digital modulation schemes which are more efficient than the older analog modulation schemes, the television stations can now fit more channels into the 6 MHz bandwidth. That means that where we may have had one analog channel, say channel 8, we now have multiple digital sub-channels, maybe 8.1, 8.2, and 8.3. In fact, WEDU, the local educational channel has six sub-channels, 3.1, 3.2, 3.3, 3.4, 3.5, and 3.6, all transmitted within the basic 6 MHz bandwidth (isn't digital wonderful). Typically the base sub-channel, the .1 channel is a High Definition (HD) channel, and the other sub-channels are Standard Definition (SD) channels. (High or Standard Definition refers to the quality or resolution of the picture displayed on the television screen. HD is referred to as 1080p or sometimes 720p, while SD is referred to as 480p. (The number is the number of horizontal lines used to create the picture and the "p" indicates a progressive scan, as opposed to an interlaced scan that was used for analog TV.) SD is about the same quality as the old analog TV picture. HD channels will also typically provide 5.1 audio, but that's entirely another story.)

So it turns out that the original decision to allocate 6 MHz for a television channel seems to have been a pretty good design decision. Or, at least the designers of the digital television equipment have been very clever in using the allocated bandwidth to their and our advantage.

<center>This newsletter article is from December 2019,
www.scccomputerclub.org, Philsorr@yahoo.com.</center>

Interdrone Conference

<div align="right">by George Harding, Treasurer,
Tucson Computer Society, AZ</div>

The Interdrone Conference, as you might guess, is about drones: how they are being used in industry, agriculture, first response, fire, police and more.

The Keynote speaker, Dan Ewell, FAA Deputy Administrator, said that there are now 1.4 million registered drones and 50,000 drone pilots that have passed Part 107 (which is required to fly drones other than for recreation).

Interestingly, drone use is now much less personal leisure and more commercial utility. Many of the sessions at this conference were oriented to first responders.

As the conference was occurring, a hurricane was wreaking havoc in North Carolina. Several of the panelists were from North Carolina and were dividing their time between sessions and communicating with the Governor! A few left the conference in order to be on the scene at the coast.

Penguin Platform
By "Free John" Kennedy, Apcug
Advisor, Regions 3 and 6/7

10 WAYS TO BOOST YOUR WI-FI SIGNAL – Check out these quick tips to boost your wireless signal from your router, extend and optimize your Wi-Fi coverage, and speed up your surfing.

Browsing slowing to a crawl, the inability to stream, dropped Wi-Fi signals, wireless dead zones—every one of these problems is maddening in a world where getting online has become, for some, as necessary as breathing. (Well, maybe not that critical… but important.)

If you feel like your Wi-Fi has gotten sluggish, there are many tools you can use to test the speed of your Internet. However, if the only way you can get decent reception is by standing next to your wireless router, these simple tips can help optimize your network.

Go to this PC magazine article and tune up your Wi-Fi signal. http://bit.ly/2SZPmfQ

EVERYTHING YOU EVER WANTED TO KNOW ABOUT INODES ON LINUX – The Linux file system relies on inodes. These vital pieces of the file system's inner workings are often misunderstood. Let's look at exactly what they are, and what they do.

Who deletes files? The elements of a file system, Inodes and file system size and more at this How-To Geek article http://bit.ly/37rQ9ul

I was surprised by how many fire, police, and rescue organizations had formed their own drone teams, with a well-thought-out training plan and organized practice field exercises.

There were several panels put on by fire first responders, showing how they employ drones to do work that would be too

dangerous for firefighters to attempt. One of the newest tools for fire groups is FLIR, an acronym for Forward Looking Infrared Radar. It can be used to identify hot spots that cannot be seen by our eyes.

There are filters that can be used by a FLIR device to make the image more understandable: black-hot, which makes the warm object black; white-hot, which makes the object white; ironbow, which makes the object golden. Each is useful in certain circumstances.

Black-Hot | White-Hot
Ironbow | Visible Light
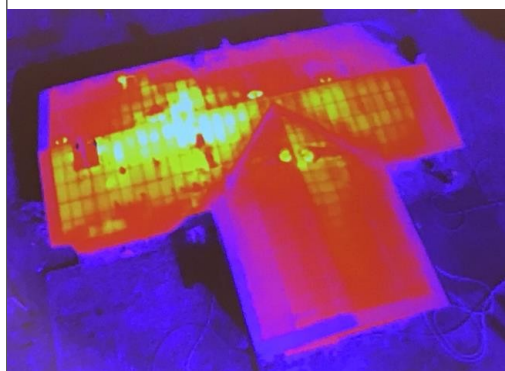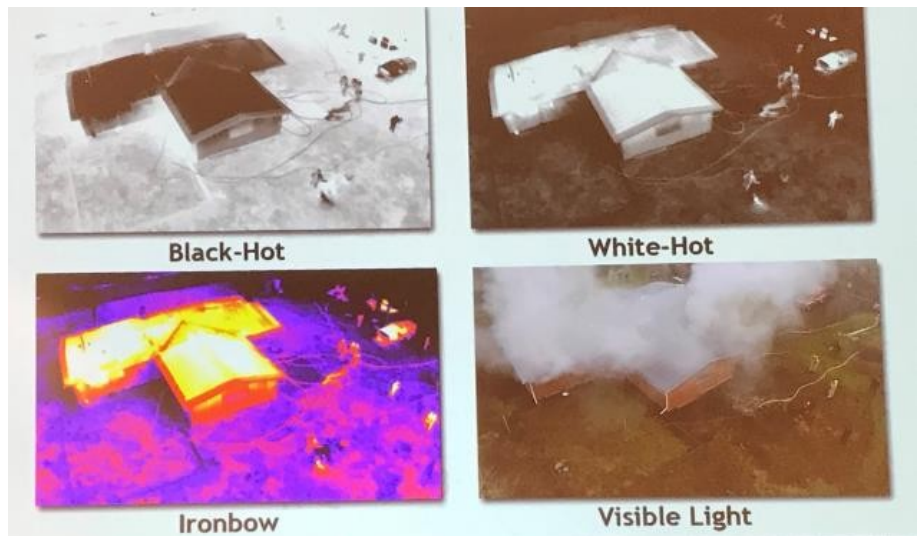
Some other applications of drones for first responders and others are landslide inspection, to see into areas that an inspector may not be able to go; storm damage assessment, to

Malcolm's ID 10 Service Call

Miriam was having trouble with her computer. So Miriam called Malcolm, the computer wiz-kid, and asked him to come over and look at her computer. Malcolm clicked a couple of buttons and solved the problem.

Malcolm gave Miriam a bill for a minimum service call. As he was walking away, Miriam called after him, 'So, what was wrong?' He replied, 'It was an ID ten T error.' Miriam didn't want to appear stupid, but nonetheless inquired, 'An, ID ten T error? Malcolm, what does that error mean, just in case I need to fix it again?'

Malcolm grinned, 'Haven't you ever heard of an ID ten T error before?'

'No,' Miriam replied.

'Write it down', he said, 'and Miriam, I think you'll figure it out.'

So Miriam wrote down... I D 1 0 T.

A ragged individual stranded for several months on a small desert island in the middle of the Pacific Ocean, one day noticed a bottle lying in the sand with a piece of paper in it. Rushing to the bottle, he pulled out the cork and with shaking hands withdrew the message. "Due to lack of maintenance," he read, "we regretfully have found it necessary to cancel your e-mail account."

get a broader view of the affected area; crash scene reconstruction; package delivery to isolated persons, especially medicines.

One area of progress in eliminating dangerous situations is drone detection. Airports, especially, need the ability to identify drones that

may impact commercial aircraft. There are several systems that can identify a drone, but few that can eliminate the physical threat.

One area that is very important to those who fly drones is insurance liability. I did not see any vendors of insurance coverage at this conference, which is surprising.

The TV and cinema industries continue to use drones to enhance their video coverage at relatively low cost. Drones give the ability to view a scene from a distance, without the use of expensive helicopters.

The drone industry will continue to expand to meet the many uses of these new devices.

Interdrone, www.interdrone.com, Admission: various prices, depending on access.

From the www.aztcs.org, actuary110@yahoo.com.

Become a Member
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. A PayPal account is not needed. You may pay for a new membership or renewal with any credit card, check or bank account (will need routing number).

Odds and Ends
https://davescomputertips.com/

PrivaZer – Excellent free cleaning and privacy tool. Deep cleans many areas. Securely erases all traces for enhanced privacy. Best in its class. Portable version available.

CCleaner – Very popular free privacy and cleaning tool. Removes temporary files, internet traces, and includes basic registry cleaner. Very safe and easy to use.

Recuva – Recuva is free software which helps recover accidentally deleted files from hard drive, camera card, MP3 Player or flash drive.

Revo Uninstaller – A free uninstaller that goes above and beyond the uninstaller built into Windows. Will search for and delete leftover files and registry items. Includes a couple of handy tools and has a portable version too. *Free edition does not include support for 64-bit applications.

Geek Uninstaller – Terrific free portable uninstaller. Fast scan and removal of leftovers. 'Force Removal' mode for broken or stubborn programs. Full support for both 32-bit and 64-bit applications.

FBackup – A free, yet very simple and effective file backup program. Back up important files and folders to local, external (USB) or network drives. Back up to ZIP compressed file or exact copy. Includes scheduler, file filters, verification, password protection and more.

ImgBurn – Highly developed advanced free burning software. Great range of features and options. More suited to advanced users.

> **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** go to www.rcsi.org/newsletr.htm and click on the URL in the web version of this newsletter.

Thunderbolt Flaws Expose Millions of PCs to Hands-On Hacking

The so-called Thunderspy attack takes less than five minutes to pull off with physical access to a device, and affects any PC manufactured before 2019.

Security paranoiacs have warned for years that any laptop left alone with a hacker for more than a few minutes should be considered compromised. Now one Dutch researcher has demonstrated how that sort of physical access hacking can be pulled off in an ultra-common component: The Intel Thunderbolt port found in millions of PCs. On Sunday, Eindhoven University of Technology researcher Björn Ruytenberg revealed the details of a new attack method he's calling Thunderspy. On Thunderbolt-enabled Windows or Linux PCs manufactured before 2019, his technique can bypass the login screen of a sleeping or locked computer—and even its hard disk encryption—to gain full access to the computer's data. And while his attack in many cases requires opening a target laptop's case with a screwdriver, it leaves no trace of intrusion, and can be pulled off in just a few minutes. That opens a new avenue to what the security industry calls an "evil maid attack," the threat of any hacker who can get alone time with a computer in, say, a hotel room. Ruytenberg says there's no easy software fix, only disabling the Thunderbolt port altogether.

"All the evil maid needs to do is unscrew the backplate, attach a device momentarily, reprogram the firmware, reattach the backplate, and the evil maid gets full access to the laptop," says Ruytenberg, who plans to present his Thunderspy research at the Black Hat security conference this summer—or the virtual conference that may replace it. "All of this can be done in under five minutes."

For more info, www.wired.com/story/thunderspy-thunderbolt-evil-maid-hacking/

China's new spacecraft returns to Earth: official

by Beiyi Seow, Ludovic Ehret, May 8

The spacecraft—which was launched Tuesday—arrived safely at a predetermined site, the China Manned Space Agency said, after a hitch in an earlier part of the key test. It said the cabin structure of the spacecraft had been confirmed on site as being intact. The test vessel was launched with a cargo capsule aboard a new type of carrier rocket from the Wenchang launch site on the southern island of Hainan. The space agency said the vessel was in orbit for two days and 19 hours and had completed a number of experiments.

The return has verified the spacecraft's capabilities such as its heat resistance—vehicles re-entering Earth's atmosphere face high temperatures. It is hoped the spaceship will one day transport astronauts to a space station that China plans to complete by 2022—and eventually to the Moon. The new prototype expands the number of crew that can be sent into space to six from three in an earlier model.

Continue reading at www.phys.org/news/2020-05-china-spacecraft-earth.html.

Spot Robot Dog Used to Implement Social Distancing in Singapore Parks

By JC Torres - May 11, 2020

While there are many that heed warnings to keep their distance or even stay indoors unless absolutely necessary, there are definitely those that may not be so diligent, especially if there's no one around to catch them. Given the lack of manpower to enforce social distancing regulations, Singapore is turning to robotics to keep an eye out and remind people about the risks they may be putting themselves and others in. The question, however, is whether their use of Boston Dynamic's popular yet unpopular four-legged robot will be an effective tool or will ironically only draw more people to it instead.

Boston Dynamics has been creating robots for years, and none of them probably match most people's images of robots. Even the smaller Spot has been known to unnerve some people who refuse to consider it even remotely close to a dog. It may not have the appearance of man's best friend but it is definitely helping save lives.

In Singapore, the quadruped robot is being used to practically police a three-kilometer section of the Bishan-Ang Mo Kio Park during off-peak hours. Its purpose is to primarily remind parkgoers to practice social distancing but a real-time video feed also allows park authorities to monitor the surroundings and even count people if needed. The government assures the cameras cannot recognize faces nor will personal data be collected.

More cool reading at www.slashgear.com/spot-robot-dog-used-to-implement-social-distancing-in-singapore-parks-11619961/.

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

APCUG

APCUG is pleased to announce that we will be having online workshops during the summer and fall.

Getting to Know Windows from An Insider's Point of View

The second Wednesday of the month at: 9 am PT, 10 am MT, 11 am CT, 12 pm ET
May 13, 2020   June 10, 2020   July 8, 2020   August 12, 2020

Moderator: Bill James, APCUG Advisor, Region 8
The four 2-hour workshops will be on how to get the best out of Windows 10. There will be how-tos, hands-on demos, and discussion with ample time for Q&A.

Week 1 - What's new with Windows 10, the 2004 Spring feature update.   **Week 2** - Settings
Week 3 - File Explorer   **Week 4** - Edge

We will use the same Zoom password encrypted meeting URL for each workshop. You will receive the URL after you have registered by completing this form**.**

Judy will be the contact point for these workshops and will be available to assist you in connecting to the Zoom sessions. The registration list will be used to identify everyone in the Waiting Room before being admitted to the session.

The next series of workshops will be on Home Automation for Seniors – same time, same place on:
September 9, 2020   October 14, 2020   November 11, 2020   December 9, 2020

Week 1 - Why do I need it?   **Week 2** - Where do I start?   **Week 3** - Lights, doorbells, locks, and cameras
Week 4 - Doing It Myself vs Having It Done

We will begin by explaining why home automation is important to seniors. What products are on the market, costs, security, and some real-world testimonials. In the second week, we will talk about how to go about planning your home automation project and best practices. In the third week, we will talk about applications using lights, doorbells, locks, and cameras. Lastly, we will talk about the benefits of making it a DIY project or having a professional install.

RCSI

   No, we haven't closed. Our usual meeting place has closed to outsiders, but we are practicing 'social distancing' online. We have used Zoom for two of our planning meetings, as a trial run. These meetings are held the first Tuesday of each month, at 7:00 pm and are open to any member. A link will be emailed to members, before our next meeting. ANY CLUB MEMBER MAY ATTEND and voice their opinions about club operations.
   We have already completed our first general online meeting, with a few hiccups while showing videos. The second online presentation will be presented before this newsletter is sent out. So, we are working out the bugs.

LINUX SIG

   You guessed it. The library is closed, so Carl sent out a link last month to try an online meeting, using Jitsi. You might not get the total hands on approach, but you can ask questions and share screens during the meeting. The Linux Workshop will take place, **third Saturday of each month**, from Noon-4PM. No, you can't bring your machine in, but you can describe your problem and Carl and the other Linux gurus will try and help you. This is a video conference, so dress appropriately.
   If you are not on the Linux emailing list, you can request a link to the workshop by contacting Carl Schmidtmann, at
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 first building on the left –
Briarwood.
Our meeting place can change. Please check our website before each meeting. **www.rcsi.org**