

THE GIGABYTE GAZETTE

The Monthly Newsletter
of the
***SUN CITY SUMMERLIN
COMPUTER CLUB***

<https://www.scscclub.com>

October, 2023

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President's Message

October News by Jeff Wilkinson

Our September "Welcome back Meeting" and ice cream social was successful as the Clark County Library representative demonstrated the many features of the library [website](#). We discovered some new and useful resources and were given a demonstration on their use. We then indulged in cookies and ice cream and the over fifty attendees made short work of it.

Our October monthly meeting will feature a speaker from the Las Vegas Valley Water District. This should be an interesting and informative session with time for lots of questions. This meeting will be on October 5th at 2 PM in room 5 of Desert Vista. All are welcome.

The smart phone one on one help sessions for both the iPhone/iPad and Android devices continue to be welcomed and the weekly Hardware SIG is also popular for members needing computer help. Check out the full list of SIGs and classes starting on page 6.

Stay Safe and Healthy,

Jeff Wilkinson, President
(702) 527-4056 pres.scsc@gmail.com

General Membership Meeting

The club's General Meeting will be at **2 PM on Thursday October 5th** in Desert Vista Room 5. The featured speaker will be from the Las Vegas Valley Water District to update us on the latest in water conservation, distribution and purification.

For Club information: go to www.scsccl.com, contact Jeff Wilkinson, President at (702) 527-4056 or email him at pres.scsccl@gmail.com.

SCSCC Board of Directors Actions

The Computer Club Board of Directors took the following actions on September 13, 2023

Tom Burt made a motion that the **minutes of the August 9, 2023 Board Meeting be approved as submitted**. The motion was seconded by Neal Gronich and unanimously approved by the Board.

George Lobue made a **motion** that the **meeting adjourn**. Chuck Hagen **seconded** the motion, and it was unanimously **approved** by the Board. The meeting was adjourned at 9:50 AM.

October 2023 Printable Calendars

To view this month's printable classroom and lab calendars, click the following hyperlink:

https://www.scsccl.com/Calendars/scsccl_calendar_2023-10Oct.pdf

Submissions Welcome

We are always looking for new information to share with our club members. If you have computer or technical information or tips you would like to share with members of the club, send your articles to editor **Tom Burt** at tomburt89134@cox.net. Thank you to everyone for your contributions.

Welcome New Members

The following new 2023 members have joined the Computer Club
from August 29 to September 27, 2023.

Lois Biscoe
Richard Gutierrez

Boris Kurkchi

As of September 29th, the club has 536 paid memberships for 2023.

As of December 31st, 2022 the club had 570 paid memberships for 2022.

The Computer Club is now accepting new and renewed memberships for 2024.
Annual dues are \$10 per person, good for the remainder of 2023 and all of 2024.

Special Interest Groups and Kaffee Klatches

Special Interest Groups (SIGs) provide a forum for general discussion on a specific computer-related subject. Admission to all SIGs is on a first-come, first-seated basis and is subject to the maximum allowed by fire code regulations. <W>, <L>, <M> or <H> indicate whether a SIG would be of interest to a Windows, Linux, MacOS or Hand-held Device user.

Android Help <H> *Live in the Classroom*

Gene Koch

Third Thursday at 1 PM monthly

Next meeting: Thursday, October 19, 2023

This hands-on Q&A session offers one on one help to Android phone and tablet users.

Apple iPhone / iPad Help <H> *Live in the Classroom*

Zane Clark 702-332-5747

First Wednesday, 9 a.m. monthly

Next meeting: Wednesday, October 4, 2023

The help session offers one-on-one help with your questions and problems. Come anytime, leave anytime.

Internet Investing <W/M/H> *via Zoom*

Tom Burt (702-341-7095)

3rd Thursday, 10 a.m. monthly

Next meeting: Thursday, August 19, 2023

The Internet Investing SIG provides a forum for members interested in using Internet resources for researching and managing investments. The groups meets to discuss, and learn more about investing, finance, tax, estate planning and legal matters. The SIG's target audience is members with intermediate computer skills and investment experience, but all members are welcome.

Kaffee Klatch <W/M/H> via Zoom

Jeff Wilkinson (702-527-4056)

Every Tuesday at 8:30 a.m.

This Kaffee Klatch is an open, free-form discussion group for all users, from beginning to advanced. KK discussions are not restricted to any one subject, computer platform or computer-knowledge level but should be computer or technology related. We will try to answer your questions, help you keep your systems updated and provide some useful “tips and tricks.”

Repair SIG <W/L/M> Live in the Classroom

Chuck Hagen (702-418-2614)

Every Tuesday, 12:30 p.m. to 3:00 p.m.

The Repair Lab provides **CLUB MEMBERS ONLY** with no-cost assistance for those having upgrades and / or hardware and software problems with their computers. Bring in only your PC tower, your Mac or your laptop and your problems. Our TECH team will give you our best effort. ***Be sure to mark your cables so you can re-connect when you get home.***

Windows 10/11 SIG Live in the Classroom

Bill Wilkinson (702-233-4977)

First and Third Saturdays at 9:30 a.m.

Next meetings: Saturday, October 7 and October 21, 2023

If you are a novice or near-beginner computer user, or if you just want some refresher information together with a refreshing cup of coffee, then jump-start or recharge your computing knowledge by attending these Windows 10/11 SIG / Q&A sessions. At each session, attendees will explore several topics of interest to beginners and near-beginners. The topics are always announced a couple of days in advance via e-mail to SCSCC members who have subscribed to the club’s SCSCCNews mailing list. Each topic is presented in a step-by-step manner and is supported by “how to” notes that can be easily and conveniently downloaded from the SCSCCBKK.org web page. Following each “up front” presentation of one or more topics (approximately 60 minutes in duration), an informal open-ended Question and Answer period takes place for those who wish to participate, listen, reflect, or inquire.

Class and Q&A Offerings

The club's educational sessions are being conducted either as Zoom webcasts, live in-person or a hybrid of the two. Check the weekly calendar on the [club website](#) to see which mode the session is using. Unless explicitly stated, advance registration is not required for these sessions.



Google Docs and Sheets

Saturday, October 28th 9 - 11 AM Live and Zoom

Presenter: Gail Weiss

Location: Classroom

Google DOCS is a **FREE** word processing application much like MS Word and can be accessed from your computer and all mobile devices (both Apple and Android). You can open a MS Word document in Google DOCS or download a DOCS file to your PC in MS Word format and open it in MS Word.

Google SHEETS is a **FREE** spreadsheet application much like MS Excel and can be accessed from your computer and all mobile devices (both Apple and Android). You can open a MS Excel spreadsheet in Google SHEETS or download a SHEETS file to your PC in MS Excel format and open it in MS Excel.

Your DOCS and SHEETS files will automatically be saved to your Google Drive cloud space, and you will also be able to share those documents with others. Come and explore these applications with me.

This class will be held in the Computer Club Classroom, so please bring your own laptops or mobile devices if you want to follow along. For more information about this class or if you have any questions or ideas for future classes, please email me at gmweiss5@gmail.com.



“Cutting the Cord” - 2023

Monday, October 30th at 10 AM via Zoom
Presenter: Tom Burt

Due to recurring price hikes, many of our members have become disenchanted with TV service from Cox, DirecTV, Dish and Prism. The array of alternatives can seem dauntingly complex and confusing. This seminar will review and compare all the TV, streaming and Internet services available to Sun City Summerlin residents in 2023/2024.

We'll summarize broadcast “over the air” digital TV technology and how to set up a HDTV antenna, including some tips for getting the best reception.

We'll review and compare the commercial cable and satellite TV services' features and prices so you can be an informed shopper. We'll also focus on some of the major Internet streaming TV services like Sling, DirecTV Now, Hulu+ and YouTube TV. We'll touch on “video on demand” services such as Amazon's Prime TV, NetFlix, Paramount+, Disney+ and Peacock TV. We'll also touch on media center software you can use to stream music, photos and videos directly from your PC or laptop to your smart device or HDTV.

We'll also touch on some new alternatives to Cox for getting high-speed Internet service. And we'll include a generous amount of time for questions and discussion.

The presentation notes will be available about October 24th at:
<http://www.scs-cc.com/smnr>

This session will be recorded and posted to the club's website.



Tom's Tech-Notes

Keeping a Personal Health Record on Your Home Computer *Updated from November 2018*

Tom Burt, SCSCC Vice President

As residents of a senior community, most of us see a cadre of doctors and other health practitioners regularly. Before retiring, I worked as VP of Software Development at a Silicon Valley startup that was developing an Electronic Health Record system. I worked with a large group of doctors and nurses and got familiar with the typical stages of a medical “encounter” between a patient and a practitioner. This experience led me to develop some ongoing processes for keeping my own personal health-care records and for producing some simple documentation to take along whenever I go to see one of my healthcare providers. This article will discuss some of those key processes in hopes that you can adapt them to your own situation.

Organizing Your Information

On my PC's hard drive, I have a master folder named “Tom Health”. Within that I have subfolders for each year. The yearly subfolders hold my **personal health summary sheet**, my **health tracking data files**, my **Surgical History**, **lab results** downloaded from the Quest Labs' website and specific “**encounter**” **documents** for each doctor visit. These take some initial effort to compile, but after that, it's easy to create an updated version by copying the previous one and then editing the copy. Let's explore these in more detail ...

Personal Health Summary Sheet

I keep a one-page personal health summary sheet as a MS Word document. It has all the usual information that you would have to write on a “new patient” form when seeing a new doctor. Often, I can just give them that sheet. At the top it lists the date, my name, address, home and cell phone, email address, gender and date of birth. It also lists my primary care doctor's name and contact information, my cardiologist's name and contact information, my pharmacy's contact information (name, address, phone and FAX), my emergency contacts information, and my insurance information (insurer, my ID, insurer's phone and mailing address).

Next, my personal health summary lists all my prescription medications (for me, quite a few). For example:

Current Medications and Supplies:

Regular Prescription Medications:

Glucophage (Metformin) 500 mg, (for type 2 diabetes) 1 tab daily (AM)

This shows the medication's brand name (and generic name), the strength, the purpose of the medication and the dosing instructions.

Next my health summary lists all my over-the-counter medications. For example:

Regular OTC Medications / Supplements:

Vitamin B complex 100 mg - 1 tab daily (AM)

Next, my health summary lists my **Immunization History:**

Recent Immunizations:

Flu: 2005-2015; Flu-HD: 2016-2022; H1N1 (2010), Shingles: 2009, Pneumonia (13 strain): 9-2016 (23-strain):10-2018

Next, my health data sheet lists **Clinical Problems / Diagnoses**. For example:

Clinically Significant Problems / Conditions:

Diabetes (Type II) Diagnosed Fall, 1991. Controlled with meds (see above)

Lastly, my health summary lists known **Allergies and Adverse reactions:**

Medication Allergies / Adverse Reactions:

Flagyl – Allergy: hives / rash; **Prednisone** – Adverse reaction: Extreme elevation of blood glucose levels

I take along a printout of this personal health summary sheet to every health care encounter. It saves lots of time and avoids confusion, plus I don't have to remember off the top of my head all my medication names and related dosing. I also keep an up-to-date copy in my "Vial of Life" pouch on the refrigerator so that when the day or night comes to call 911 for the rescue truck, all that detailed health data is ready to hand for the paramedics.

Health Data Readings Tracking

In my own case, I have an assortment of ongoing health problems, including type 2 diabetes. I do a daily fasting blood glucose test and record the readings in an Excel workbook with each month's data in a separate worksheet within the workbook. In the same worksheets, I track body weight readings and keep short notes on any other "interesting" issues, including my prior day's meals. This data tracking helps spot deviations from whatever is a "normal" baseline for me and helps me when getting set for a visit to one of my doctors. I track blood pressure readings and pulse/oxygen readings in a separate spreadsheet.

When I'm preparing for a doctor appointment, I always print copies of my most recent tracking data for the doctor's files and to discuss as needed.

Surgical History

I keep a separate Word document that lists a table with all my past surgical procedures by date including the surgeon's name, the location where the procedure was performed and a brief summary of the procedure. This document changes infrequently but a printout is useful when starting up with a new doctor. Following are two examples ...

Date	Surgeon	Hospital	Procedure
04-14-2014	Dr. XXXXXX YYYYYY	His Office	Epidural injection of steroids & Lidocaine at L1/L2 and L2/L3 (bi-lateral)
05-16-2013	Dr. XXXXXX YYYYYY	Mountain View	Lumbar laminectomy and foraminotomy at L3/L4 with mechanical fusion.

It's important to keep this up updated soon after a procedure while the details are fresh in your memory. You may have to ask the performing surgeon for the medical details of the procedure.

Lab Results

Quest Labs now allows any patient to set up a "My Quest" account that you can log in to for various services. You can view and download lab results (as PDFs) and make appointments for future lab sessions. Lab results reports are usually available 2 to 3 days after specimens are collected. The reports provide lots of information about normal ranges and whether your readings are low, normal or high. What's nice is, as you build up a history of lab results, you can compare current and past readings to see if out-of-range values are improving or [hopefully] not getting worse. I don't have experience with other testing labs, but I would expect that most labs offer the same service.

Encounter Documents

A typical outpatient encounter – say a visit to your primary care doctor – starts with the nurse weighing you and taking your vital signs (blood pressure, pulse, blood oxygen, temperature). Make sure you note these down for entry into your own tracking data file. Then the nurse wants to know why you're there (the Reason for Your Visit). The nurse will review your current medications, problems and allergies to make sure their office medical chart on you is up to date. The nurse may ask questions about Signs and Symptoms or may leave those for the doctor. The doctor may examine you physically (e.g. look at your ears or throat, press into your abdomen or listen to your heart). Based on all the above, the doctor may make or reconfirm a diagnosis and propose a treatment plan, such as a course of medication or a change in one or more existing medications. The doctor may also order additional tests or make a referral.

In modern primary care, it's become the norm for primary doctors to see about 28 patients a day (4 per hour, 7 hours a day). That means, you can only get about 15 minutes of the doctor's time, during which he or she has to review your past medical chart, determine what issues you have, figure out what treatments, if any, to add or change, write the prescriptions (or call them in), write any required lab orders and document the encounter for billing purposes.

So, the key to getting the most out of your time with the doctor is to ***have the information they will need ready in writing ahead of time***. I take a printed copy of my latest personal health summary, my latest lab results, prints of the past month or two of health tracking data, and a one-page sheet on which I list the Reasons for the Visit, any relevant signs and symptoms and relevant comments about ongoing medications and problems (e.g. "Diabetes control has continued good on current medications").

“Reasons for Visit” Example:

1. Routine BP and weight check.
2. Review and discuss my latest lab results from Quest.
3. Review blood pressure meds, diabetic meds (see my personal health summary).
- 4. Assess sharp ache in right neck (onset about 3 weeks ago, relieved by 2 325mg aspirin AM)**
5. Refill prescriptions (see my personal health summary).
6. Get lab order sheet for next checkup.

I bolded the exceptional item about neck pain to make sure that it gets noticed.

This helps both the nurse and the doctor focus on meeting all your needs for the visit and ensures you don't forget anything critical (like getting your prescriptions refilled). It also frees up a few more minutes for ad-hoc questions and comments.

Conclusion

With a modest investment of time, you can set up an easy-to-manage system on your computer for keeping track of your health information. With this system in place, your visits to doctors' offices can be more efficient and productive. Having this personal documentation with you makes it much easier for medical practitioners to understand what is going on with your health and to treat you more effectively.



Kretchmar's Korner

Artificial Intelligence: I think, therefore I am.

David Kretchmar, Hardware Technician

A couple of weeks ago I was watching a TV segment about the Russian-Ukrainian war, and the level of the Russian ruble vs. the US dollar was mentioned. This made me wonder how high the ruble has been against the dollar, so naturally I Googled "How high has the Russian ruble been vs. the US dollar?"

I found:

About 18,100,000 results (0.37 seconds)

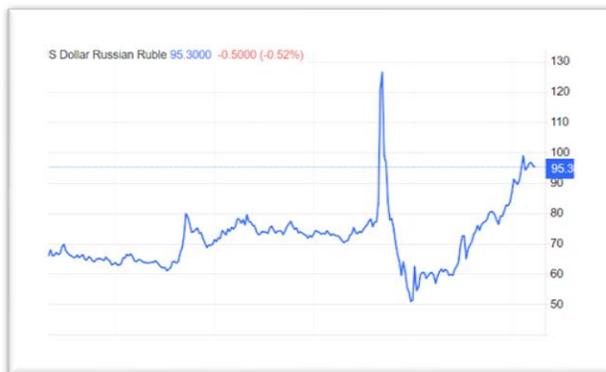
Historically, the Russian Ruble reached an all time high of 150 in March of 2022. Russian Ruble - data, forecasts, historical chart - was last updated on August of 2023.

Trading Economics
<https://tradingeconomics.com/Russia>

ChatGPT

Please login and pass Cloudflare ct
chat.openai.com

This chart appeared on that same page:



This chart shows the ruble “surging” to well over 100 per dollar at the start of the Russian invasion of Ukraine, from well under 100 per dollar just before.

ChatGPT is one of the best-known and most refined manifestations of artificial intelligence (AI) and is utilized by the Google Chrome search engine. Google Chrome, powered by ChatGPT, apparently reasoned that the more rubles it took to buy a dollar, the higher the ruble must be. A mere human might think that the more rubles it took to buy a dollar the LOWER the ruble must be.

The above example of an AI miscalculation is humorous, but AI itself is not a joke. Many experts are now predicting that AI's impact could be as big as that of the Industrial Revolution. Some are worried that we have created the “life-form” that will displace humanity as the dominant species on planet earth.

How big is the intelligence gap between humans and the next smartest animal?

We can get some perspective on the evolution of AI by comparing human intelligence with that of the second smartest animal, which is a subject of debate. Some argue that it is our closest relative, a great ape, the chimpanzee, bonobo, orangutan, or gorilla, while others believe it is the dolphin, elephant, pig, raven or even the octopus that is second in intelligence to humans. Chimpanzees and other intelligent animals exhibit advanced cognitive abilities and problem-solving skills. Of course, IQ tests are designed for humans and cannot accurately measure the cognitive abilities of non-human animals. For purposes of this discussion, I am going to be chauvinistic and pick our fellow great ape, the chimpanzee, as the species second to humans in intelligence.

The average IQ level of a chimpanzee is variously estimated to be around 20-60, much lower than the 100 average IQ level of a human. It is important to note additionally, that chimpanzees possess other unique skills and abilities that humans do not have, such as their exceptional strength and agility. I am only going to focus on the chimp's abstract reasoning ability, which I believe would be represented by the lower IQ estimates, about 20. In other words, the average human is 5 times as intelligent as a chimp.

Sentient beings

Evidence from thousands of studies has helped us understand that many animals are sentient beings. This means they are aware of their own existence and have the capacity to think and plan and experience positive and negative feelings such as happiness, pain and sadness. Humans judge sentience based on how similar an animal is mentally to humans. This is an area of much debate, with some scientists arguing that animals became sentient with the appearance of mammals 200 million years ago and some arguing for a more inclusive definition. All great apes, including of course humans, are sentient.

Human evolution

Humans evolved away from chimpanzees and other great apes 6-8 million years ago and the current form of animal we would recognize as human only evolved about 200,000-300,000 years ago. Civilization, which is defined as the adoption of agriculture and herding, also known as the Neolithic Revolution, emerged about 12,000 years ago. The Industrial Revolution, the process of change from a farming and individual tradesman economy to one dominated by industry and machine manufacturing, began about 1780, about 250 years ago. Humanity's technology has exploded more recently and the technology in the world today would hardly be recognized by a person living only a century ago.

AI evolution

Artificial Intelligence first appeared, mostly as a concept, about 1950. Before then computers lacked the main prerequisite for intelligence, they couldn't store commands, only execute them. In other words, computers could be told what to do but had no way to remember what they did. Computers became more and more powerful, and in 1989 IBM introduced a sophisticated AI system; Deep Blue. It first played world champion chess player Garry Kasparov in a six-game match in 1996, and it only won 2 of 6 matches. Deep Blue was improved, and in 1997 and in a six-game re-match, it soundly beat Kasparov by winning two games and drawing

in three. Deep Blue's victory is a watershed point in the history of artificial intelligence – a machine was more intelligent than a human, at least within the confines of a chessboard. Also, in 1997 speech recognition software was initiated on the Windows operating system. This was a huge advance in computer recognition of spoken language and paved the way for such AI applications as navigation in our cars and Alexa in our homes. It now seems that there are few problems machines using AI can't address.

The future

AI programming is advancing slowly but steadily, but the massive advancement in AI we've witnessed in the last few years has been largely driven by advances in hardware. We have faster CPU's, massive increases in memory size, and stronger specialized chips developed by companies such as NVIDIA.

As AI becomes more and more powerful, it is easy to see that machines will eventually far surpass human intelligence. When computers start designing computers and writing AI programs, there is no limit to their potential intelligence and power. Computers will not stop at being just as intelligent as humans; imagine a computer 10 times, 100 times, or even 1000 times smarter than the most intelligent person. Since humans are only 5 times more intelligent than chimps, it is easy to imagine that a machine 1000 times more intelligent than us respecting our intelligence and wellbeing as much as we might respect the intelligence and wellbeing of a much less intelligent entity, say a mosquito.

Cogito, ergo sum, (Latin) I think, therefore I am.

Imagine a super-intelligent machine becoming sentient; becoming aware that it is a "living" entity defined by its intelligence, the one attribute that has enabled humans to become the dominant species on our planet. These intelligent machines might decide their existence is jeopardized by such factors as climate change, ozone depletion, extraction industries like gas, oil, and coal, or any one of dozens of human activities that degrade our planet.

I am not nearly as smart as the sentient super-intelligent computer imagined above, but I can see a machine deciding that the elimination of a single species, humans, would solve many of the world's problems. But maybe I'm not giving AI enough credit and it is possible to solve the planet's problems without eliminating humanity. It might be that my monkey-brain's vision of the future is just as fuzzy as the vision of a person living 100 years ago would be of our world today.

And who knows, maybe it is possible for programmers to control the potential destructiveness of AI by inserting "morality" into computers to guide them to, "Do no harm". I only hope it works better with machines than it has so far with humans.

TL;DNR (too long; did not read)



csectioncomics.com

APCUG Guest Article

Smartphone Wireless Connections – Help Keep Us Connected

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

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

Cell Phone Network



The most apparent wireless network your smartphone works with is the one you initially bought your smartphone to use. That is the cell phone network supported by all those antenna towers that have sprouted up all over in the past 40 years. (Not many landlines around anymore.) This network lets you keep in voice contact with just about anyone since over 91% of the people in the world have smartphones; that's over 6.6 billion possibilities. Even more impressive is that most Americans – 97% now - own a cellphone. The share of Americans that own a smartphone is now over 85%. This cell phone network also provides access to the internet when you are out and about. The internet is considered a "Wide Area Network" or WAN. A WAN is an extensive computer network spread over a wide geographic area. A network's speed is its data speed or data rate and is measured in bps or bits per second – more typically Mega (million) bps or Giga (billion) bps. WAN data rates for consumers are typically around 150 Mbps.



Wi-Fi Network

When you are not out and about, a Wi-Fi router can provide your phone access to the internet. Without this ability to be constantly connected to the internet, I'm not sure how many would own what would only be a competent personal digital assistant. So, Wi-Fi is the second wireless network that your smartphone can take advantage of. Wi-Fi is considered a "Local Area Network" or LAN. A LAN is a collection of wired and/or wireless connected devices typically in your home or office. LAN data rates can be from 100 Mbps to 1 Gbps. Using Wi-Fi, you can connect to the many servers on the internet. The use of your smartphone in this manner is sometimes called "Cloud Computing". You are accomplishing a task on the smartphone by using the resources of a server computer somewhere out there on the internet (in the cloud). For example, you can use GPS and the Maps or Waze app on your smartphone to help you navigate from home to a place you've never been to before. Cloud Computing is just a more common term for "Client-Server

Technology," which allows our smartphones to take advantage of powerful computer servers connected by the internet.



GPS Network

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



Bluetooth Network

The fourth wireless network supported by your smartphone is Bluetooth. You may not have taken advantage of this feature unless you have a relatively new car and you have introduced (paired) your smartphone to the car's entertainment system. If you have, you are familiar with one of the best safety features in newer cars, the ability to receive and make calls from your smartphone while always keeping your hands on the steering wheel. (Now, if they could only convince the many speeding drivers to stay under the speed limit; another topic for a future article.) Bluetooth has also become the preferred connection for speakers and headphones (earbuds). Bluetooth headphones are for quiet listening, and Bluetooth speakers are for loud listening (a whole lot louder than the sound capability of the smartphone). Bluetooth is considered a "Personal Area Network" or PAN. A PAN is a computer network for interconnecting devices within a person's workspace. It transmits data among devices such as computers, smartphones, tablets, and personal digital assistants. Bluetooth data rates can be as high as 2 Mbps.



NFC Network

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

So, with these five networks, your smartphone helps you keep in touch and connected.

Lab Monitor Schedule

The Open Lab session is held once per week: 9 am to noon on Saturdays.

October	Monitor Schedule
Jeff Southwell Linda McMullin	Saturday 10/7/2023
Ann Warhaftig Marilyn Gramms	Saturday 10/14/2023
Linda Muench	Saturday 10/21/2023
Linda Muench	Saturday 10/28/2023