

News Journal

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Podcasting
April:
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“Members Helping Members”

Volume 35 Issue 11

Happy New Tech Year

President's Corner

By Greg Skalka, President, Under the Computer Hood UG, CA

January 2019 issue, Drive Light

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Another New Year is upon us. As we start 2019, I wonder what new technology we will see this year, and how it will affect our lives. It seems we can't swing a corded mouse (better for our times than a dead cat) without hitting some piece of technology in our lives. So many things we take for granted today were not around 20 years ago, or even 10. Smart phones, smart homes, smart cars, smart TVs - everything is becoming smart through technology. How did we ever survive with only dumb stuff around us?

We have just concluded another busy holiday shopping season. Remember when that meant spending the month of December in the shopping malls, standing in long lines? Now with online shopping (especially Amazon.com) and all the tech that enables it, we can do all our shopping from home. With our smart phones, we can even shop while on the go. This trend has resulted in big changes in our behaviors, as well as in our local and global economics. Brick and mortar chains that were once the powerhouses of commerce, like Sears, are shrinking or going out of business. Almost all businesses fear Amazon, as it has transformed the shopping experience in many categories. How will Amazon next change our lives?

The concept of two-day delivery of products used to be exceptional and/or expensive, but now it is commonplace (and the default for all those Amazon Prime subscribers). Will 2019 finally be the year that Amazon makes good on their plans to deliver products the same day using

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News Journal

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LCACE membership is open to all individuals and families interested in personal computing. Annual dues are \$20.00 per individual/family. Applications for membership may be obtained at the monthly meeting, by request on the club hotline, and are now available on our web site at <http://www.lcace.org>.

Meetings

LCACE meetings are usually held on Saturdays at the Grayslake Area Public Library, 100 Library Lane, Grayslake, Illinois. The meeting room opens at noon and the formal meeting begins at 12:30 p.m. All meetings are open to the public. Bring a friend!

Newsletter Submissions

Club members are welcome to submit classified ads, reviews, tips and other articles for publication, to our newsletter editor in Microsoft Word format (.doc). **Publication deadline is the 20th of the month for all ads and articles.** Please do not use tabs or special formatting.

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Phil's Ramblings



I mentioned Groundhog Day last month and speculated whether Punxsutawney Phil was correct about winter ending in six weeks. Since then, I've run across this humorous photo of

Phil:



Three more weeks, and we'll find out the truth..... (Meanwhile, bundle up!)

We continue to see bits 'n pieces about 5G wireless service and Wi-Fi 6. I've sent some of these articles out to LCACE members via our Google Groups email service and will continue to do that in the future, but anyone who is interested in keeping up-to-date can simply search the Internet for "5G wireless" or "Wi-Fi 6" and browse through the search results for the latest news. These technologies will be rolled out over two years or more, so be patient.

(One note.... 5G wireless (also known as 5G cellular service) should not be confused with the 5GHz channel on your home Wi-Fi network. Here's a How-To Geek article that ex-

plains the differences: [https://www.howtogeek.com/398620/whats-the-difference-between-5g-and-5ghz-wi-fi/.](https://www.howtogeek.com/398620/whats-the-difference-between-5g-and-5ghz-wi-fi/))

Other new technologies and tech products continue to appear:

- The lines between Smart Assistants (Amazon Echo, Google Home, etc.) and Smart Home devices and controllers is becoming more and more blurred as the Smart Assistants add new "skills". Companies that designed and sold dedicated Smart Home hubs are losing ground to the two big AI companies.
- More companies are entering the Smart Home marketplace, with many new devices shown at the Consumer Electronics Show earlier this year. Stay tuned!
- Meanwhile, some concerns have surfaced about possible negative side effects from at least one Smart Home device – smart thermostats. (I've just sent out info to all LCACE members about this potential issue via our Google Groups email link.)
- Microsoft will be rolling out yet another big update for Windows 10 in April.
- There are more and more alternative video-calling apps / services besides Skype, some offering unique features or advantages.
- USB-C technology is moving beyond cell-phones and can now be found on many new computers.
- SSD (solid-state) drives are gradually displacing traditional hard drives in new computer offerings. (Because these SSD drives are five times faster in data transfer than HDD drives, some users are replacing the hard drives in their current computer with after-market SSD drives.) Now we are seeing a further advance-

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ment in personal data storage – Non-Volatile Memory Express (NVMe) drives - which come in various configurations and are 25 times faster than an HDD.

USB nomenclature is changing (in addition to USB-C, mentioned above). Traditional 2.0 USB ports and cables are being replaced by the faster 3.0 version in new tech products. (USB 3.0 transfers data at 5.0 Gbps.) Meanwhile, the techies have come up with a USB configuration that will transfer data at 10 Gbps. Then someone came up with the idea of combining two of the latter cables into one, to allow transfer of 20 Gbps. After considering various new names for these improvements, the USB Implementors Forums (USB-IF) organization has come up with the following marketing names for the different 3.0 configurations: SuperSpeed USB, SuperSpeed USB 10Gbps and SuperSpeed USB 20 Gbps. I'm sure we will hear more about this transition as 2019 progresses. (Not sure when we will see these technologies in the marketplace.)

Technology is not the only thing that keeps changing. So do scams. The FTC has just published a detailed Consumer Sentinel Network report for 2018, breaking out all sorts of statistics about consumer scams reported last year. (While scary enough, these statistics may only be the tip of the iceberg, since many victims are embarrassed to report that they have been scammed.) You can read this report at https://www.ftc.gov/system/files/documents/reports/consumer-sentinel-network-data-book-2018/consumer_sentinel_network_data_book_2018_0.pdf.

We have a lot to keep up with during 2019! Please think about the items I've listed here – as well as other tech / security questions or concerns you may have - and let Linda Rohlfing or myself know which you would like to have as presentation topics over the remainder of the year.

Thanks!

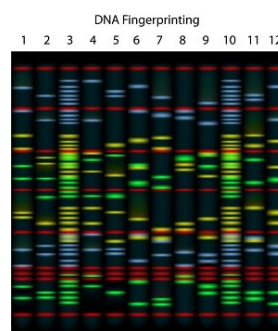
Phil

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drones? Amazon CEO Jeff Bezos claimed in December 2013 on "60 Minutes" that drones would be delivering packages within five years. Where are our drone deliveries?

There are plenty of drones, or unmanned aerial vehicles (UAVs) out there now, of all kinds. They protect our borders, launch strikes against our enemies, photograph and film our events and monitor our real estate, crops, forests and construction. They can also provide entertainment, through personal use and drone racing. Unfortunately, misuse of the technology has also occurred, requiring new regulations for their use. From interfering with fire-fighting efforts in California wildfires to the recent shutdown of the Gatwick Airport in England due to drone overflights, we have seen how these useful devices could be misused by vandals, criminals and terrorists. Some aviation experts believe it is just a matter of time before a drone causes a commercial plane crash.



Another technology that didn't exist ten years ago is personal DNA analysis. Companies like AncestryDNA, 23andMe and MyHeritage claim to provide ancestry information and ethnicity breakdowns.

Some claim to provide genetic health information and predisposition to inherited conditions. Some can match you to others that may be relatives. These are home kits that allow you to provide a sample that is analyzed and potentially matched to the samples of others. Many of these kits were discounted for the holidays and advertised as great gifts.

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These tests may be entertaining and can provide useful, though perhaps vague, information on your ancestry and genetic health. There are some concerns about privacy and accuracy, however, and you may learn things you might have wished you didn't know. One company's test reportedly failed to identify that a submitted sample was actually from a Labrador retriever. Some have learned from these tests that their parentage is not as they were led to believe, or that they had half siblings unknown to their families. Submitting your sample puts your DNA information in the test company's genetic database, which could be used for things you didn't intend. One example is in identification of suspects in law enforcement investigations. These genetic testing companies could also share or sell genetic information to insurance or pharmaceutical companies.

Loss of privacy seems to be a common risk with a lot of the new technology we have adopted in the last decade or two. In the best case, our personal information, preferences and habits (such as for travel and consuming) have become a commodity that companies we deal with can use, buy and sell, with advertisers looking to improve their sales to us, the consumers. In the worst case, criminals are trying to gain, through tricks or theft, our personal information, especially that dealing with our identity and account passwords, in order to steal from us, or sell to others that will. Somewhere in the middle is the threat posed to the individual by a police state that has accumulated detailed information on its citizens, with the goal of tracking and controlling them.

In addition to the information that we provide online with our computers, or in using our smart phones, we now have to worry about the data collected by our connected cars. Automakers are collecting ever more information about how our cars are running and how we

use them, and that information is often accessed wirelessly. While older cars are still safe from this, about 3 in 4 of the cars sold by 2020 will be online. This information may be able to help track your car servicing more easily, update safety systems and provide emergency services, but it also could be sold to insurance companies eager to study your driving habits or provided to law enforcement to determine where you have been or when you have been speeding.



Self-driving cars have seemed to be on the verge of introduction to the consumer for a few years now;

perhaps 2019 will finally see a service generally available. Many companies have been testing autonomous vehicles for years, mostly with human back-up drivers. Autonomous trucks, taxis and cars could be revolutionary forces in our society, economy and labor market. These technologies could reduce transportation costs greatly and help provide greater freedom for the disabled, and likely would reduce vehicle accident rates.

Technology appears to be finally allowing humans to once again make real progress towards space travel. Christmas Eve 2018 marked the 50th anniversary of the first flight to the moon, where Apollo 8 orbited the moon and took the first photo of Earth as a distant object. Following the final Apollo moon landing, however, human space flight never left low Earth orbit. Now that many commercial companies are competing with NASA to fly



cargo and ultimately people to the International Space Station and beyond, progress in space is accelerating. Several companies, including Elon Musk's SpaceX and Jeff Bezos' Blue Origin, have successfully demonstrated the recovery

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(landing) of a rocket first stage, allowing reuse and a lower cost for future launches. Musk has a plan for SpaceX to be able to launch people to Mars within six years. I feel for those that watched the moon landings as fifty-year-olds and then died disappointed that humans never again did anything so dramatic. With luck my 82-year-old parents will see people on Mars.

National Geographic has created a TV series called 'Mars', which is very inspiring, yet brings some concerns with the human colonization of that planet. It portrays some of the issues we could face in the development of space technology by private companies, rather than government entities, a road we appear to be going down now. It shows the parallels this could have with the commercial development of resources here on Earth in the arctic. It is a series well worth watching.

As hopeful as I am that all the new tech we get in the New Year will on balance be a benefit to humankind, I sometimes wonder more about the humans. Many notable people, including Stephen Hawking, Elon Musk and Bill Gates have concerns about artificial intelligence, or AI. AI is on its way, so I wonder if one day we will have to battle with it for our survival, as in 'The Terminator' movies, or will we humans gladly relinquish our control over technology, should that time come. A study by McCann Worldgroup of young people in seven countries conducted in 2011 indicated that 53% of 16 to 22-year olds would prefer to give up their sense of smell than their technology. Will our future turn out rosy, or just stink?

President's Corner

By Greg Skalka, President, Under the Computer Hood UG, CA



MEETING NOTICE!

February 9, 2019

Membership Chairperson

J.J. Johnson

Members: 47/51%

Meeting Attendees: 24

THANKS FOR JOINING

Kathy Simon

THANKS FOR RENEWING

Ellen Smatlak

DeBorah Sirilla

Thomas Krissek

Harriet Rudnit

THANKS FOR VISITING

Yvonne Mitchell

Dorothy Bulls



Beat the April rush!

Pay Dues

Lexar JumpDrive Fingerprint F35

By Jasmine D’Katz



Before and after a club meeting, I’m always looking for a way to transport or backup my club photos and other media on a portable storage device, but worried about losing it and have my data stolen. Lexar has what I needed. Their USB 3.0 flash drive features a built-in fingerprint scanner, preventing unauthorized users from gaining access to stored data. Lexar claims a registered fingerprint will allow access in under one second, this minimizes disrupting my work flow. The drive is capable of storing up to 10-fingerprints ID’s and employs advance 256-bit AES security. The speed of the device is up to 150MB per second.

The drive is available in #@GB, 64GB, 128GB and 256GB and works with Windows and Mac operating systems. Ideal if you don’t want your photos or data to end up in the wrong hands.

\$35.00+

www.lexar.com

Kretchmar’s Korner

How to Connect a Laptop PC or a Tablet to an iPhone Personal Hotspot

By David Kretchmar, Computer Hardware Technician,
Sun City Summerlin Computer Club, NV

September 2018 issue, The Gigabyte Gazette

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Most smart cellphones can connect to the Internet wherever they can find a 3G or 4G sig-

nal, but most PCs and tablets need a Wi-Fi connection to get online. Some tablets do have 3G and 4G connectivity, but those cost extra and aren’t that common. As a result, users with smartphones can usually get online in places other device users are stuck offline.

This article discusses a technique for using your iPhone as a personal hotspot, allowing your PC to connect to the Internet. My personal experience relates specifically to the iPhone, but similar techniques are applicable to most other 3G or 4G Android cell phones. I only have an iPhone to play with, and a Windows 10 laptop PC to connect, so my experimentation was limited to these devices.

On the iPhone

You need to set a Wi-Fi password in order to set up a Personal Hotspot. To create the Wi-Fi password, go to Settings > Cellular > Personal Hotspot, then tap the Wi-Fi password.

Choose a Wi-Fi password that’s at least eight characters long and use ASCII characters. ASCII characters include all the letters in English, both lowercase and uppercase and the digits 0 through 9. Many punctuation marks are ASCII, but most people avoid them in passwords.

Turn on Wi-Fi and Personal Hotspot on your iPhone, if it’s not on already. You can do this through Control Center or the Settings app.

Tap Settings

Tap Wi-Fi

Now go to Settings > Cellular

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L.C.A.C.E. Club Historian

History Report, 2019-01-12

By Les Larkin

L.C.A.C.E. Club Historian
History Report, 2019-02-9 Meeting

By Les Larkin

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Our February meeting was conducted by Phil Bock.

New Business was about our annual picnic. It will be inside an environmentally controlled structure.

Bart Berndtson won the door prize. No clue what it was. Phil Bock won \$9.00 in the 50/50 raffle. Congratulations to our winners!

Linda Busch made the coffee, and she and Fred Barnett provided munchables for us.

This month's presentation was about Skype, and some alternatives, by Phil Bock.

Another great meeting, and I hope to see you at our March 16 meeting.



RoboKiller

STOP ROBOCALL WITH "ROBOKILER"

The App That Stops Spam Calls Forever

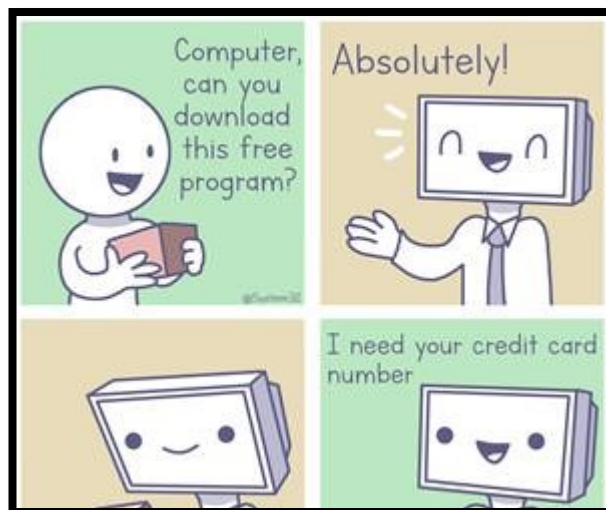
by Jasmine D'Katz

5.2 billion robocall were made during the government shut down because the National DO-CALL Reregister was offline. 50% of most calls today are ROBO calls.

RoboKiller will automatically block over a million telemarketers and robocalls from even ringing your phone. Most robocallers are spoofing or changing their number and RoboKiller will block them. RoboKiller thoughts a 90% reduction in spam calls in your first 30 days of service.

They use an AnswerBot to waste the spammers time while detecting voice patterns and can keep the spammer online for up to 45 minutes. This all happens before you get the call and all you will receive is a notification that RoboKiller has blocked a Robocall. Check out their website and listen to the technology in action and get a 7-day free trial. There is a monthly fee for this convenience, but you can decide if it worth your time and money.

www.robokiller.com

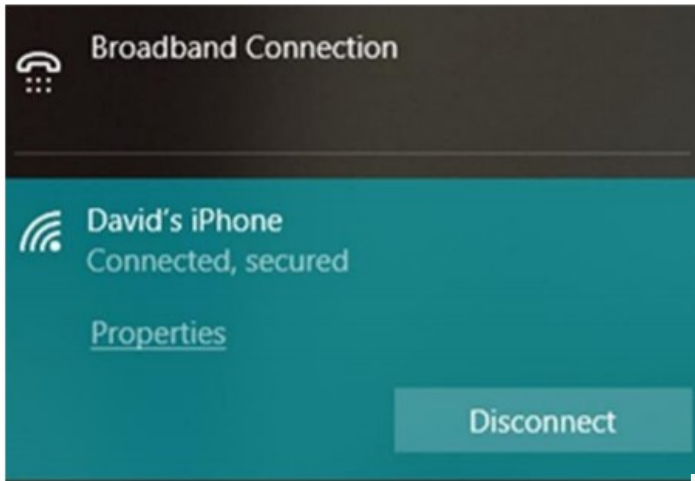


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Tap Personal Hotspot, and then tap the slide button to turn it on. Note that the password you established now shows.

If you don't see the option for Personal Hotspot, contact your carrier to make sure you can use Personal Hotspot with your plan.

On the PC or other device you want to get online



Click on the wireless icon; on a Windows 10 PC this will appear near the right side of the Taskbar. This will reveal the wireless networks available. In this example I saw the name I assigned to my iPhone, "David's iPhone." Click on your network and enter the network password. It's that easy!

When you connect a device to your iPhone Personal Hotspot, the status bar turns blue and shows how many devices have joined.

The number of devices that can join your Personal Hotspot at one time depends on your carrier and iPhone model. If other devices have joined your Personal Hotspot using Wi-Fi, you can use only cellular data to connect to the Internet from the iPhone host.

Naturally, cellular data usage and possible charges (if you exceed your plan limit) will apply when you use your iPhone to connect any device to the Internet.

L.C.A.C.E.
FEBRUARY 50/50 WINNER
Phil Bock



L.C.A.C.E.
FEBRUARY DOOR PRIZE WINNER
Barton Berndtson



CELL PHONE PHOTOGRAPHY

By Dick Maybach, Member, Brookdale Computer User Group, NJ

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Most cell-phone camera photos have little lasting value, making their quality unimportant. However, these cameras are rapidly improving, and more people are using them on vacations and at important events. It now becomes important to take the care to make their pictures worth showing, meaning you must now better understand your camera and its software. The quality of your photos depends more on your photographic skills than on your camera. Good photographers take good pictures regardless of their equipment, and those with limited ability take poor ones regardless of how much money they spend or the tonnage of gear they carry. Dedicated cameras can take better pictures, but they are usually kept safe at home, while our cell phones are almost always with us.

The first step is to recognize the limitations of cell phone cameras.

- Their shapes make them difficult to hold steady, especially while making adjustments.
- They have tiny sensors, making low-light photography difficult at best.
- They reside in pockets and purses, and their exposed lenses quickly become dirty.
- Their lenses are simple with fixed apertures and focal lengths.

Taking good pictures requires learning to compensate for these limitations.

Cell phones' small display screens hide many sins. Develop the habit of transferring every image to a PC, whose large, high-resolution monitor allows you to see what you've captured, warts and all. Moving pictures to a PC also makes them available to image processing software and frees the limited storage space in your phone. Simple changes, such as cropping, exposure correction, and noise reduction, can make large differences.

You hold a conventional camera against your face with both hands. The viewfinder has optics that make the image appear to be about a meter from your eye, and there is an adjustment to compensate for aging vision. Compare this to a cell phone that you hold at arm's length where its screen is often in direct sunlight. Clearly, the latter is subject to a lot more twitching, and using a

selfie-stick makes this worse, creating blurry photos, especially in dim light. To minimize this hold your phone with both hands and release the shutter with a dedicated button (often one that controls the volume) rather than jabbing at the screen. Bend your arms so that your elbows are pressed against your waist or are resting on a table if you are sitting. In dim light, rest the phone against a solid object if possible. If your near vision is limited, hold the camera at arm's length to make adjustments, but pull it closer to take the picture.

Tap the screen on the point where you want the camera to set its focus and exposure, otherwise it will make a choice. The result could be a sharply focused, well exposed shrub in the foreground and an overexposed blur in the background barely recognizable as the Leaning Tower of Pisa. If your subject is moving, set the camera to take a sequence of pictures; you'll throw most of them away, but you may capture the moment you want. Also consider a sequence when photographing a group; you'll have a better chance to catch everybody's eyes open. Always squeeze the shutter button rather than jab at it; the latter jerks the camera. Taking a photo sequence means the timing is not important, so even here you can be gentle with the shutter.

The best compensation for a small sensor is to have plenty of light when you take the picture. You can sometimes achieve this by moving so the light source is behind you; certainly try to avoid back-lit subjects. Another approach is to limit the exposure sensitivity, which the camera sets by adjusting its ISO, although not all photo apps and phones allow this. For my phone, ISO values above a few hundred produce very noisy images, which even capable photo processing software can't correct. Once you limit the ISO, you will find you have long exposure times, which means you now must place the camera on a solid support to reduce the shake. You probably also want to delay the exposure, so that it takes place a few seconds after you press the button, giving you time to ensure the camera is steady. Again, not all camera apps have this feature.

Carry a clean, soft cloth or a packet of lens cleaning paper and use it often to clean the lens. Also, keep in mind that the lens is right at the surface of the case and has no shade. You may have to use your hand to keep sunlight from striking it directly. Let's see now, you are holding the phone with one hand, operating the controls with another, and shading the lens with a third, while all the time trying to hold it steady. A shutter delay may help, but some thinking may be better. Perhaps you can stand in the shade or ask someone to cast a shadow on your camera.

The simple lens is always set for wide-angle pictures; it achieves a telephoto effect by throwing away the outer portions of the image. As a result, you should avoid using the camera's zoom feature, instead move closer to your subject. If you can't, then take the picture at wide angle and throw away the unwanted portion of the image with processing software after you move it to your PC. This gives you more flexibility on what you choose to include in the finished photo. Figure 1 shows a picture taken in normal (wide-angle) mode.



Figure 1. Image in Wide-angle Mode.

Figure 2 shows the same image taken using the zoom feature. The camera throws away the portion of shown in red; however it processes the image so that it has the same number of pixels before it stores the file. If you enlarge two images of the same scene, one wide-angle and one zoomed (you'll of course have to magnify the wide-angle one more), you will see that both have about the same resolution, meaning the added pixels in the zoomed image have not improved its quality. Now do the same experiment, but instead of zooming, move closer to your subject, and you'll find that the latter image does have more detail.



Figure 2. A Zoomed Image.

Finally, be aware that unlike a dedicated camera, a cell phone camera has a fixed aperture; it controls exposure only by adjusting the ISO and exposure time. As a result, you have little control of the depth-of-field. However, because a cell-phone camera has a small sensor, its depth-of-field is large, making it a concern only when you are very close to your subject.

Most photo apps have features you can use to improve your pictures. Figure 3 shows the default display for Moto Camera, the photo app supplied with my Motorola phone. Note the rule-of-thirds guide lines, which help to compose your photo. A common technique is to locate the main subject at one of the intersections. Some apps give you a choice of several such composing aids. Note also the yellow icon around the subject, which appears because I tapped the screen there to create a focus and exposure point. This app also allows you to adjust the exposure by moving the white spot around the icon circle. The other visible controls are (on the left) set manual or automatic mode, set the delay, control the flash, take a high-dynamic-range photo, and (on the right) select movie, still, or panoramic mode, and switch between the front and back cameras. The large white button on the right is the on-screen shutter release.

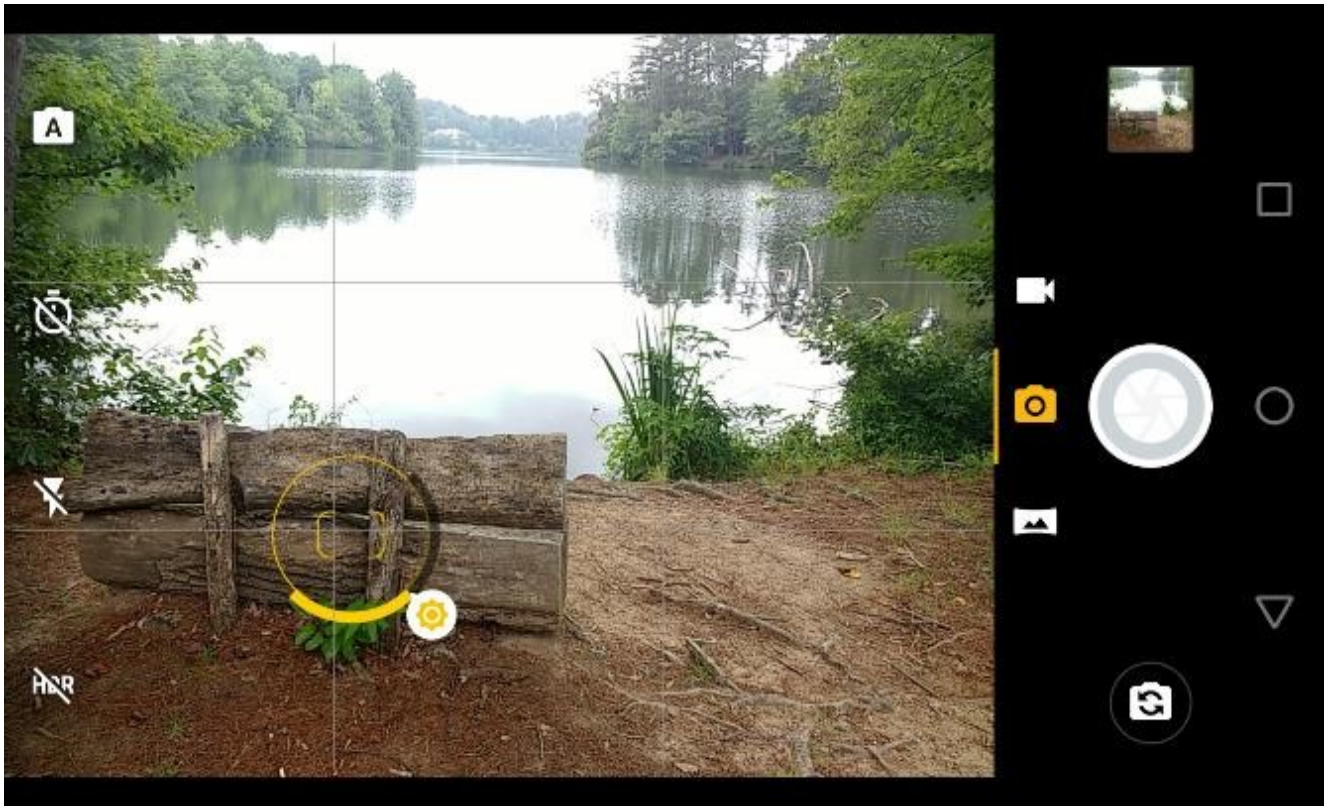


Figure 3. Moto Camera Display.

Surprisingly, I found the photo app supplied with my phone (available from the Play Store as Moto Camera) to be the one I use most often. It allows for adjusting the focus, white balance, shutter speed, ISO, and exposure, includes an exposure delay, high-dynamic-range (HDR), panoramas, and can disable the flash. It doesn't allow photo sequences, and I use Open Camera for this feature.

Figure 4 shows the manual mode of Moto Camera, which allows considerable flexibility. The controls are, from left to right: focus, white balance, shutter speed, ISO, and exposure compensation. You move the white circles to make adjustments. Except for exposure compensation, a white dot at the bottom of its arc means that adjustment is automatic.

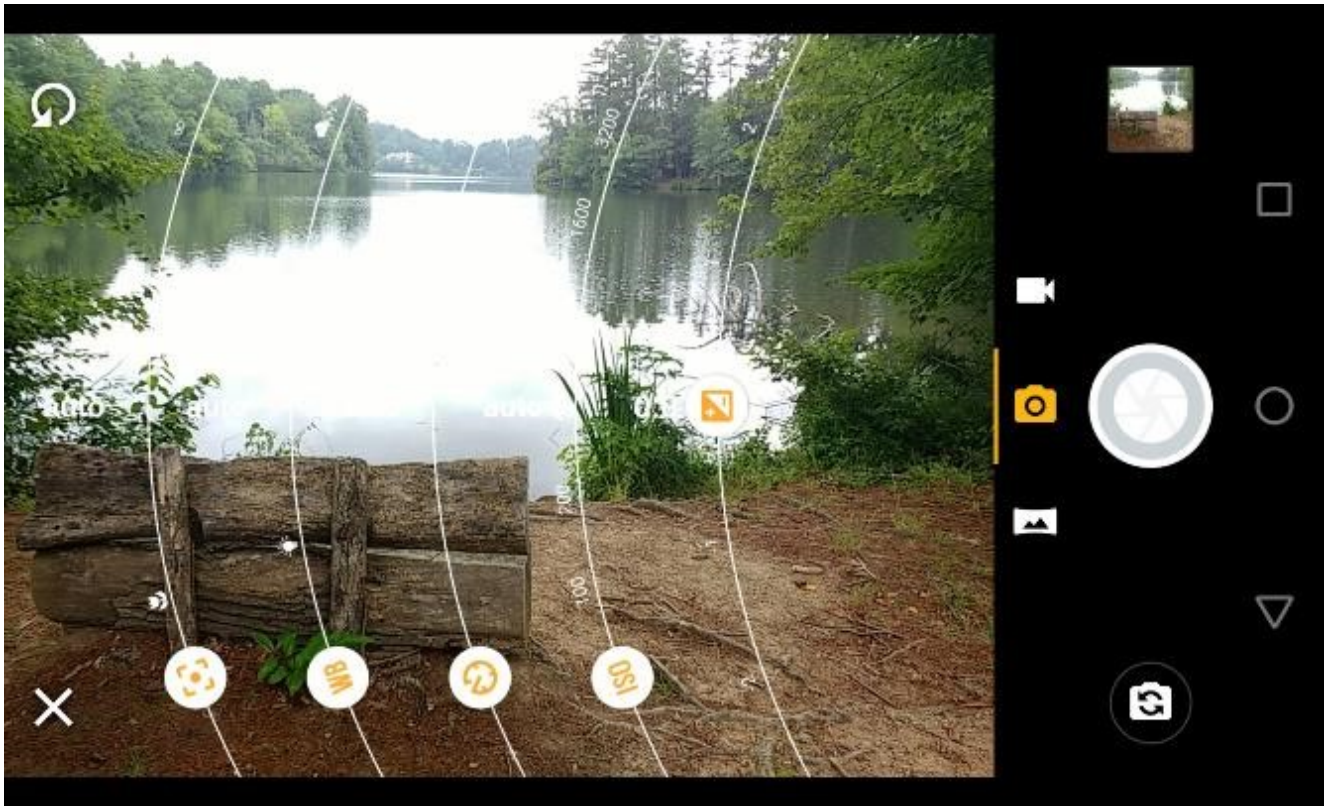


Figure 4. Moto Camera in Manual Mode.

Many apps offer high dynamic range (HDR) where they take several photos at different exposures and combine them with the goal of showing details in both the very bright and the very dim areas. In my experience, it is very difficult to obtain acceptable HDR results, even with a professional camera and high-quality photo processing software. The results with a phone camera and its app software are often disappointing, but you have nothing to lose by trying. The technique won't work on moving subjects; even leaves moving in the background will cause problems. Some apps, for example Open Camera (available from the Play Store), have a dynamic range optimization (DRO), which processes the shadow and highlight areas differently in a single image. This works for moving subjects and I've found the improvement often approaches that using HDR. Open Camera will also save the individual images it combines into an HDR one, which enables you to use your PC processing software and perhaps get better results than with the app's software.

The capabilities of a photo app depend on the version of Android under which it runs and on what features the vendor has enabled. To get everything you need, you will have to experiment and probably install more than one photo app.

We can summarize this discussion as follows.

- Hold the camera firmly with both hands and use a dedicated button to release the shutter and squeeze rather than jab at it.

- Brace your elbows and in low light rest the camera on a firm support. Consider using a shutter delay to reduce camera jiggle.
- Minimize using the zoom feature but take your pictures at wide angle.
- Always select the focus point.
- Keep your lens clean, and shade it from direct sunlight.
- Look at your images on a large, high-resolution monitor.
- Experiment with camera apps to find those that best suit you and your phone.

With a little care and practice you can take surprisingly high-quality photos with your cell-phone camera, often approaching those from dedicated cameras and far surpassing those from cameras of just a few years ago.

Cell phone photography accessories

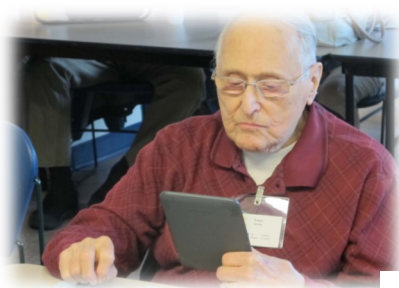




Lake County Area Computer Enthusiasts

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