South Bay Apple MUG
Macintosh

February 2019

A Monthly CUPFUL for South Bay Apple Mac User Group Members

Machine Learning, by Steven Strogatz

In early December, researchers at DeepMind, the artificial-intelligence company owned by Google's parent corporation, Alphabet Inc., filed a dispatch from the frontiers of chess. A year earlier, on Dec. 5, 2017, the team had stunned the chess world with its announcement of AlphaZero, a machine-learning algorithm that had mastered not only chess but shogi, or Japanese chess, and Go. The algorithm started with no knowledge of the games beyond their basic rules. It then played against itself millions of times and learned from its mistakes. In a matter of hours, the algorithm became the best player, human or computer, the world has ever seen.

Computer chess has come a long way over the past twenty years. In 1997, I.B.M.'s chess-playing program, Deep Blue, managed to beat the reigning human world champion, Garry Kasparov, in a six-game match. In retrospect, there was little mystery in this achievement. Deep Blue could evaluate 200 million positions per second. It never got tired, never blundered in a calculation and never forgot what it had been thinking a moment earlier. For better and worse, it played like a machine, brutally and materialistically.

All of that has changed with the rise of machine learning. By playing against itself and updating its neural network as it learned from experience, AlphaZero discovered the principles of chess on its own and quickly became the best player ever. Not only could it have easily defeated all the strongest human masters — it didn't even bother to try — it crushed Stockfish, the reigning computer world champion of chess. In a hundred-game match against a truly formidable engine, AlphaZero scored twenty-eight wins and seventy-two draws. It didn't lose a single game.

Most unnerving was that AlphaZero seemed to express insight. It played like no computer ever has, intuitively and beautifully, with a romantic, attacking style. It played gambits and took risks. In some games it

paralyzed Stockfish and toyed with it. While conducting its attack in Game 10, AlphaZero retreated its queen back into the corner of the board on its own side, far from Stockfish's king, not normally where an attacking queen should be placed.

The question now is whether machine learning can help humans discover similar truths about the things

Jan 30 Meeting
OS Mojave

The main presentation will consist of a discussion of the latest Mac Operating System, Mojave (10.14) with Jim Pernal doing the honors. The presentation will include the requirements for using this system, how to upgrade, why you should upgrade, and finally a few of the new features in the system with some demos. Some of the new features are Dark Mode, Stacks, and new supplied apps.

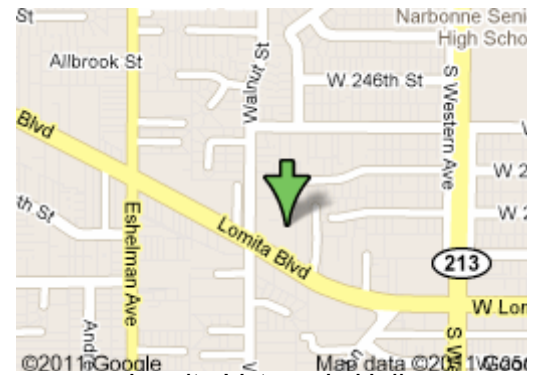*Don't miss the meeting! See page 2 for details.*

IN THIS ISSUE

Welcome to the SBAMUG
South Bay Apple Mac User Group

Members,friends and colleagues are invited to attend our monthly meetings (usually the last Wed. of the month). The $35 annual membership dues entitle you to receive this monthly newsletter by mail or online, plus many more benefits (page 8). To become a member or get more info please visit our website sbamug.com

Meetings: Lomita Veteran's Hall,
1865 Lomita Blvd, Lomita
Mail: PO Box 432, Redondo Beach, CA
90277-0432
Phone: (310) 644-3315
Email: info@sbamug.com

Lomita Veteran's Hall,
1865 Lomita Blvd, Lomita

SBAMUG Monthly Calendar
Jan 30: Mac OS Mojave
Feb 27: Numbers vs Excel

SBAMUG Meeting Format:
6:30—7:30 p.m. Questions & Answers and Sharing: *Everyone* is welcome, beginners encouraged
7:30—7:50 p.m. 'iSocial' – shoot the Mac breeze with others over a cookie*
7:50—8:00 p.m. Announcements
8:00—9:00 p.m Program
Refreshments provided; donations appreciated!
Submit suggestions for topics or speakers, or articles, ideas & original artwork for this newsletter to pjmyerz@gmail.com by the last Wednesday of each month. Articles may be edited to fit space.

Other Meetings:
• 1st Wed each month – SBAMUG Core Group, 7:30 pm. Join Google+ SBAMUG community, or email: info@sbamug.com.
• 2nd Sat. each month - SMOG, 9AM in Costa Mesa, ocmug.org
• Last Sat. each month - Northrop Grumman-Ham Radio & Computer Swap Meet, 7--11:30 a.m. Meet at SE corner of Marine/Aviation Blvd, Redondo Beach
• Los Angeles Portable Users Group: Mac OS X, iPhone, iPod, MacBook, etc., .lapug.org/
• Find more: http://www.apple.com/usergroups/

Officers & Volunteers:
President: Kent McDonald
VP: open
Secretary: Wayne Inman
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Directors at Large: Dave Nathanson, Arnold Silver, George Wilde, Joan King, Pete Myers
PD Disk Editor: Jim Pernal
Membership: CW Mitchell
Member Development: Pete Myers
Programming: Kent McDonald
Greeter: open
Server Director: Dave Nathanson
Newsletter: Pete Myers, Bill Berks
USPS Liaison: CW Mitchell
Refreshments: Arnold Silver/Andy Paroczai

Membership Report – 86 members!
Please wear membership card as your name tag - you may notice your first name is in larger letters on your card - so it can be used as a name tag at the meetings.:)
Welcome New Members: Richard South
Thank You Member Renewals: Andrew Paroczai, Kathleen Spearman, Marie Cooper, Bill Lee. Joe Locascio, Kazuo Ogawa, Dan Rey.
If your name is not spelled right or your expiration date is wrong, contact cwmitchell@sbamug.com for correction. Or contact CW for everything membership, dues and benefits.
Please watch for your renewal letter, then sign and date it and return it with $35 check (in enclosed self-addressed envelope) or bring letter with payment (cash, check, PayPal) to meeting.

SBAMUG January 2019 Shareware

This is the January shareware article; and a happy new year to all.

ABFR 10.36: A better Finder rename. Long existing program. Some bug fixes in this version. Complex renaming options. Powerful. Requires OS X 10.10+ $23.00 http://www.publicspace.net/ABetterFinderRename/index.html

Audio Hijack 3.5.6: This audio will play audio from any source. Various enhancements in this version. OS 10.11+ $59.00 https://www.rogueamoeba.com/audiohijack/

Mactracker 7.7.7: Free database program about every Mac, IOS device, printers, Keyboards, displays etc, that was ever built. OSX 10.9+. http://mactracker.ca

NeoOffice 2017:15 : Office suite program. Reads and writes simple Microsoft Office files as well as open office formats. $29:00 In Apple App Store OSX 10.12+ Intel

Stellarium 0.18.3: Open source planetarium program. Shows sky as you would see it. OSX 10.10+ 3D graphics OpenGL 1.2+ Free https://launchpad.net/stellarium

VLC 3.0.5: Multimedia player for various audio and video formats. This version adds support for AV1 streams. OS 10.7.5+ Free (donationware) http://www.videolan.org

See you at the January meeting.

Jim Pernal PD Editor

SBAMUG Election

The election of MUG officers for 2019 was held at the December meeting. All club officers from 2018 were reelected.

What Is the Difference Between WhatsApp and Regular Texting?, by Frank Elliott, Composer/Lyricist

What you may call regular text is also widely referred to as SMS (short message service), especially abroad.

The main difference between SMS and the many other Internet-based IM(instant message) services is that SMS requires a cellular (wireless) telephone account, but the Internet-based IM services require only an Internet connection, so the Internet-based variety are "free" if you have Internet access. SMSes are either included in telco service plans or paid at some small amount (like $0.05) per message.

Of course another important factor is the type of device required to send these instant messages. SMS is geared to wireless phones and Internet IMs are geared to computers. However given apps on phones, there is a very large overlap in usability between both types.

You didn't ask about this, but in the interest of thoroughness, iPhones can SMS other iPhones over the Internet (no cellular data service needed); Android phones don't support that.

There may be a maximum-characters difference. The traditional maximum for SMS was 140 characters (also the same for a Twitter tweet [it was how Twitter decided on 140]), but this may have been more recently increased to 160.

There are many other differences based upon the revenue model and comparative user-acceptance of each service (read the terms of service for each of them for details). e.g., Facebook and Google+ are ad-based and so "free." One other important consideration is popularity/acceptance... WhatsApp is fairly new to the "digital messaging space" but has already achieved significant popularity.

Having already surrendered access to my personal data details to both my telco and Facebook in order to use their services, I have opted not to use too many others, so I can keep my private details private.

Finally, plain-text SMS (which originated on pagers) used to be all there was back in the dark ages before the Internet became so pervasive. Since roughly 2000, all manner of color/graphics smileys/icons and attached images, etc. have been added to most if not all services. Check with your service providers for your included features—and for how to make best use of what your hardware and software supports.

My 128K Mac, by Darrell Summers

we really care about: the great unsolved problems of science and medicine, such as cancer and consciousness; the riddles of the immune system, the mysteries of the genome.

Read the full article at https://www.nytimes.com/2018/12/26/science/chess-artificial-intelligence.html?module=inline

Selling Your Car?, by Colleen Tressler, Consumer Education Specialist, FTC

Your car is a computer that stores a lot of information about you - just like your smart phone or home computer. When you sell or donate your car, that personal data might be accessible to the new owner if you don't take steps to remove it.

Some cars have a factory reset option that will return the settings and data to their original state. But even after a factory reset, you may still have work to do. For example, your car may still be connected to subscription services like satellite radio, mobile wi-fi hotspots and data services. You need to cancel these services or have them transferred to your new vehicle. Here are types of data you want to remove from the electronic system before selling or donating your car:

- Phone contacts/address book
- Mobile apps log-in information or data that's gathered or stored in mobile apps
- Digital content like music
- Location data like addresses, routes and favorite places
- Garage door codes

Also, check to make sure you've cleared connections between your devices and your car. For example, apps that let you control the car's functions or find the car.

For more information, check your owner's manual, contact your dealer or visit the vehicle manufacturer's website.

Don't forget car rentals. You may have synced your phone to the rental vehicle or entered addresses on the vehicle GPS system. Remove this information before returning the rental.

Editor's note: The Macintosh 128K, originally released as the Apple Macintosh, is the original Apple Macintosh personal computer. Its beige case consisted of a 9 in (23 cm) CRT monitor and came with a keyboard and mouse. It had an initial selling price of $2,495 (equivalent to $5,887 in 2017). The centerpiece of the machine was a Motorola 68000 microprocessor running at 7.8 MHz, connected to a 128 KB RAM. The Macintosh contained a single 400 KB, single-sided 3.5 inch floppy disk drive. It came with a manual and a unique guided tour cassette tape which worked together with the guided tour diskette as a tutorial for both the Macintosh itself and the bundled applications, since most new Macintosh users had never used a mouse before, much less manipulated a graphical user interface.

SBAMUG member Darrell Summers has one for sale (email him or SBAMUG if you are interested) and he has quite a story to tell.

When I was in middle school in early 1984 (I was 12 at the time, in 7th grade), I went with my parents to look for a computer for us to have in the house. I was going to need it for school, and we wanted to get a good one. There was a brand new type of computer just coming out called a Macintosh, and it looked amazing compared to the Apple 2E or DOS machines at the time — it had graphics capability,

128 K Mac

and an interactive interface as opposed to purely command line. We saw one in the store before it was available for purchase, and even though it was more expensive (I don't remember the price, but I think it was over $1000, which was a lot in 1984) that was the one we decided to get. We still have a letter signed by a guy named David Bunnell thanking us for being one of the original Mac owners, and one of the original subscribers to Macworld magazine.

I used that Macintosh 128K throughout high school and college. MacWrite was an amazing word processor, and there are still things I like about it more than the newer microsoft word today. It did everything I needed to write lots and lots of papers. MacPaint was a fine graphics editor, and Multiple was a precursor of Excel. For all of those functions, it did an outstanding job for me for the next 10 years throughout college as I got my aerospace engineering degree. The MacWrite application was something like 50K in size — a tiny fraction of the size of Microsoft Word today — but it did everything you needed. It's ability to build tables was limited, and it couldn't do automatic tables of contents, but anything else I would use today writing papers it could do.

I learned to program on Microsoft Basic on the Macintosh. Not just silly "hello world" stuff, but actual interactive graphical games. Started by coding up my own version of "pong", but quickly got completely bored with that and made more complicated games. I made a very elaborate multiplayer stock market simulator game (goal was to make the most money), and a horse racing game (pick the winners), and a maze runner game... 100x100 grid, player would have a symbol (an asterisk I think) moving through the maze which would be revealed as they moved... you couldn't do that sort of stuff on any other home computer at the time.

I also enjoyed some of the games you could buy for the Mac... Ancient Art of War (a precursor to the Civilization series) and Ancient Art of War at Sea (a naval combat game) were two of my favorites.

We still have that original 128K Mac and the Imagewriter printer to go with it... it sat in my parents' house for 15 years after I got out of college, and has sat in my garage for the last 10 years. Last time I tried it a few years ago, it still turns on and works fine. We don't have many of the disks for it anymore (most of them got thrown out years ago), but still have the mint-condition Macworlds from all of 1984 and 1985 starting with the premier edition, and the original Mac user's guide and a few other books. It has a nice dust cover, and all of that old technology was very sturdy. Keyboard, mouse, external drive, printer... all of that lasted through 10 years of heavy use, and (as far as I know) still works today.

We've not sold it... hard for me to get a feel for what sort of value it has outside of to a collector or museum. We would like to... it's just taking up space in our garage.

My current job is fault management for the James Webb Space Telescope which is launching in a couple of years. It's been quite the ride, and I do have to say, that Macintosh helped me to become the fun-loving technical nerd I am today.

Should You Buy Someone a Phone?,
by Eric Ravenscraft

It's a good time to buy yourself a phone, but should you buy one for someone else? Like buying someone a puppy, that's a complicated question.

Stores love to advertise phones as a great gift idea, and offer buy-one-get-one-free deals or discounts when you sign up a new line. However, our phones are deeply personal devices. Someone might dislike a particular phone because it doesn't fit in their pocket, because it doesn't work on the right carrier, or even because it's not the right color. Buying the right phone for someone else can become complicated very fast. Here are some of the

big stumbling blocks to watch out for when phone shopping for a loved one, if you want to do it at all.

Make sure you get the right carrier

A new phone without a cellular network to support it is just a tiny Wi-Fi tablet. Before you buy a phone for your friend or family member, you need to know what carrier they use, then find out whether or not the phone you're buying works on that carrier. Cameron Summerson, news editor for tech website How-To Geek, has covered and reviewed smartphones for years and he said that getting the carrier right should be your top concern.

"Depending on what carrier the recipient is on, you'll need to make sure that the phone is compatible with that particular network," he explained in an email. "This is most true for Verizon and Sprint, which tend to be more strict with bring-your-own-device policies. While most phones these days are quad-band" — meaning they should work on all major carriers — "there are definitely still some outliers that don't offer the compatible bands for all networks. This is most true for new iPhones, which should be purchased for the specific network they will be used on."

This can be easier said than done since the iPhone faces a unique problem. If you buy one from Apple directly, or buy a phone from Verizon or Sprint, it will include both the radios required to work on Verizon and Sprint as well as the radio most of the rest of the world uses. Once unlocked, *that* phone will work on just about any carrier. However, if you buy an iPhone from AT&T or T-Mobile, it will only include the radio that those carriers support, which means you won't be able to take it to Verizon or Sprint. See the problem?

You can use a site like FrequencyCheck.com to look up specific phones by model number to make sure they work on the carrier your recipient uses. However, the most surefire way to make sure you're getting a phone that works on a certain carrier is to buy it from that carrier (or an authorized reseller like Best Buy). If you're stepping out into used phones or buying directly from the phone manufacturer, that's when you need to be careful.

It's also worth checking with your gift recipient about their upgrade status. Most carriers have switched to a phone financing model, where you add a monthly fee to your plan until you've paid off your phone. However, some customers may still have the old two-year contract model, where you get a discount on a new phone in exchange for committing to another two-year contract. It might ruin the surprise a little, but if your recipient has an upgrade available and doesn't plan to change carriers, paying for an upgrade to a phone of their choosing might be cheaper (and better for them) than buying a new phone outright.

Stick with what they know … unless they hate it

When in doubt, make as few changes to what they have now as possible. Pay attention to what they currently have and any complaints they have about that specific handset. Unless you specifically know that the person wants to change platforms, it's usually easiest (and best) to stick with what's familiar — so, a new iPhone for an iPhone user, and a new Android phone for an Android user.

If your recipient has a large phone, stick with something big. If it has a fingerprint sensor on the back, try to find a new phone with those same features. Some features that seem minor to you might require bigger changes for them. For example, if they have a headphone jack on their current phone, but you buy a new phone without it, then they might have to buy wireless headphones or adapters just to use their phone the same way they used to.

Read the full article at https://www.nytimes.com/2018/12/05/smarter-living/should-you-buy-someone-a-phone-for-the-holidays.html?

5G is Coming, by Don Clark

What exactly is 5G?

Strictly speaking, 5G is a set of technical ground rules that define the workings of a cellular network, including the radio frequencies used and how various components like computer chips and antennas handle radio signals and exchange data.

Since the first cellphones were demonstrated in the 1970s, engineers from multiple companies have convened to agree on new sets of specifications for cellular networks, which are designated a new technology generation every decade or so. To get the benefits of 5G, users will have to buy new phones, while carriers will need to install new transmission equipment to offer the faster service.

How fast will 5G be?

The answer depends on where you live, which wireless services you use and when you decide to take the 5G plunge.

Qualcomm, the wireless chip maker, said it had demonstrated peak 5G download speeds of 4.5 gigabits a second, but predicts initial median speeds of about 1.4 gigabits. That translates to roughly 20 times faster than the current 4G experience.

There's another kind of speed, a lag known as latency, that may become even more important with 5G.

Issue a command now on a smartphone — like starting a web search — and the response isn't exactly immediate. A lag of 50 to several hundred milliseconds is common, partly because signals often must pass between different carrier switching centers; 5G, which uses newer networking technology, was designed to reduce latency down to a few milliseconds. It was also designed to deliver signals more reliably than earlier cellular networks, which today frequently drop bits of data that aren't essential for tasks like watching movies on a phone.

That improvement could bring many benefits, notably in fields such as virtual reality. The highest-quality VR applications now typically require bulky headsets that are connected by wire to nearby personal computers that generate 3-D images. With 5G, that would be off-loaded wirelessly to other machines, freeing users to move and making it easier to develop goggles the size of eyeglasses, said Cristiano Amon, president of Qualcomm's semiconductor business.

In the related field of augmented reality, people could point a smartphone camera at a football game and see both live video on the display and superimposed player statistics or other data, said Patrick Moorhead, an analyst at Moor Insights & Strategy.

And 5G's impact extends to medicine and other fields that increasingly rely on high-speed connections. "If you talk about remote surgery or connected cars, you don't want latency times to be too long," said Fredrik Jejdling, an executive vice president at Ericsson, a maker of cellular equipment.

When will 5G be here?

The answer for smartphone users in the United States appears to be by the second quarter of 2019; precise timing is uncertain. AT&T has actually switched on its mobile 5G service in 12 cities, with seven more targeted in its initial rollout plan. But smartphones aren't ready yet for a direct connection to 5G networks. So AT&T will initially market a 5G hot-spot device, made by Netgear, that can funnel wireless broadband connections to nearby phones and computers using Wi-Fi.

Verizon is already selling a 5G-branded service — based on its own variant of the technology — to provide wireless internet connections to homes in limited parts of Houston, Indianapolis, Los Angeles and Sacramento. The carrier predicts that it will begin serving smartphone users in the first half of 2019, without identifying cities or specific timing.

Sprint said it might also switch on a 5G service first for smartphones next year, initially targeting nine American cities. Its prospective merger partner, T-Mobile, has stressed a nationwide 5G launch in 2020, but said it was installing gear in 30 cities that would be ready when 5G smartphones appeared in 2019.

Will consumers see the full benefits of 5G?

Verizon and AT&T will introduce their 5G offerings with the first use of high frequencies that are known by the phrase "millimeter wave." Using this, the wireless providers can pump data at high speeds, but the signals don't travel as far. So the two carriers are expected to first target densely populated areas. Sprint and T-Mobile plan to start with lower frequencies. The result may be somewhat slower initial speeds but broader range, said Michael Thelander, president of Signals Research, a wireless consultancy.

Still, 5G's full benefits aren't expected until American carriers upgrade key central switching equipment, which may not happen until late 2019 or sometime in 2020.

So should I buy a smartphone that works with 5G right away?

A consumer study sponsored by Intel in August found that 58 percent of Americans were not knowledgeable about 5G or had not heard of it, though another survey in December by the chip maker indicated solid demand once the benefits were explained.

Confusion actually could increase over the short term because of some technical details.

You have a lot to consider. For example, while Verizon and AT&T plan to later add 5G services based on lower frequencies that offer wider coverage, the first 5G handsets may not work with those portions of their networks. So the reach of 5G signals for those phones may remain limited.

"I wouldn't buy a 5G phone until it supports 5G in one of the lower-frequency bands," Mr. Thelander said. "For all operators but Sprint, this means at least late 2019, and more likely 2020."

Read the full article at https://www.nytimes.com/ 2018/12/31/technology/personaltech/5g-what-you- need-to-know.html?

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SBAMUG Membership Application

South Bay Apple Macintosh User Group provides you with a local source of shared knowledge & experience through monthly meetings, trainings & monthly newsletter.

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