

## Musings of an Apple Tyro

by Lorrin R. Garson  
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- By 2026 such CPUs are expected to have more transistors than the human brain has neurons (~100 billion).
- Intel manufacturing works on a 14 nm scale. In comparison a human red blood cell is 7,000 nm across and a typical virus is 100 nm in size.

## 2016 Computex

See <http://bit.ly/1rvQLZQ> for an overview of this Taipei trade show, including a 10-core CPU from Intel (at \$1,723!), 7<sup>th</sup> generation APUs from AMD, new GPUs from AMD and Nvidia, new motherboards, a 512 GB SSD from Samsung the size of a postage stamp, etc.

## How Intel Makes a Chip

Bloomberg Businessweek (June 13-June 26, 2016, pp. 94-100) has published an excellent article on how Intel manufactures computer chips. Here are a few highlights:

- It costs at least \$8.5 billion to create a factory to build chips.
- Starting with a 12-inch silicon disk, each disk yields 122 Xeon E5 CPUs selling for \$4,115 each. These are CPUs used in high end servers, not home computers.
- Chips are created through 2,000 steps of photolithography (a form of printing) and the deposition of ultra-thin layers of materials, some the thickness of a molecule.
- Each Xeon E5 has up to 7.2 billion transistors.

## Look Into My Eyes...

Researchers at Brown University have developed eye-tracking technology that can be added to any Web site. To quote from <http://bit.ly/1tDn2jL>



*Overall, it could help website developers prioritize popular or eye-catching content, optimize a page's usability, or place and price advertising space. Further ahead, potential applications could include eye-controlled gaming or broader accessibility.*

## Mac Internet Recovery

Newer Mac computers have the ability to boot-up from the Internet, should your hard drive be completely dead. See <http://bit.ly/1UiqiMN> for detailed information and <http://bit.ly/1tvBCcr> for a useful video on this topic. If the operating system is corrupted and/or the the disk drive is repairable, recovery can often be achieved by using Disk Utility and/or reinstalling the OS from

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the recovery partition (see <http://apple.co/1tDmOZP>). This is a topic that may warrant being prepared for—think fire drill. Of course, you can always drop off your computer at an Apple store for repair.

### Symptoms of Malware Infection

How do you know if you've been infected with some kind of malware? It's an increasing problem. Here's what you might experience:

- Computer slows down.
- Unwanted pop-ups appear.
- Computer crashes.
- Suspicious hard drive activity.
- Running out of hard drive space.
- Unusually high network activity.
- New browser homepage and/or toolbars.
- Unusual messages or programs that start automatically.
- Disabled security software.
- Friends tell you they are getting strange messages from you.
- A program holds your computer for ransom (you won't have to look for this).



For details see <http://bit.ly/1rvQIgP>, <http://bit.ly/1V8Bw0t> and <http://bit.ly/1Y2PdoR>.

### Audits of Open Source Software

How safe and secure is open source software? In principle, anyone can make changes to it and potentially introduce flaws that the bad guys could exploit. Mozilla has set up an initial \$500,000 fund called “Secure Open Source” to provide security audits of open source code. Mozilla is hoping that companies and governments that use open source software will join in the effort and provide additional funding. See <http://bit.ly/1WWSXaA>.

### UPS Maintenance

We generally ignore our UPS units (uninterruptible power supply) until they don't

work. The power goes off and your computer, and other attached equipment, goes down. Generally, our UPS units are just left in some out-of-the-way location (under a desk, in a closet, etc.) and ignored; that's what I do. It would be prudent to visually check UPS devices every six months or so to see if the batteries are being charged and everything you think is plugged in is indeed properly plugged in. Sealed lead batteries deteriorate over time with most manufacturers recommending they be replaced after three years or so. Some inexpensive UPS devices don't have replaceable batteries and the whole unit needs to be replaced. Recently we had a power failure and my Mac computer went down at the same time. What? Why didn't the UPS do its job? Checking the panel of my APS Model XS 1000 showed dead batteries. So either the batteries were indeed dead or the UPS wasn't charging them. Replacing the 6-year old batteries solved the problem. By the way, replacing the two batteries in this particular UPS is a bit challenging. Yes... do as I say (write) and not as I do!

### Updates to Office for Mac

Many Apple computer users also use Microsoft Office rather than the office automation tools that come with Mac computers (e.g. Pages, Numbers, Keynote, Mail, Calendar, etc.). Microsoft has provided information at <http://bit.ly/24ZlBHz> that provides information on updates.

### Upcoming Meetings

Refer to the PATACS Event Calendar on the back cover or <http://patacs.org/mtgdetpat.html> for meeting time and location.

#### September 7, 2016 (Tysons Corner) Presentation: Microsoft Band

The Microsoft Store in Tysons Corner Center (<http://www.microsoft.com/en-us/store/locations/va/tysons-corner/tysons-corner-center/store-10>) will host a meeting about the Microsoft Band wearable device.

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### September 17, 2016 (Fairfax) Welcome Fall Celebration

Join us in the Social Annex for a party complete with food and refreshments! “Learn in 30” (formerly “Learn 30”) tutorial sessions will resume in October.



### Presentation: Social Media for the Non-Tweeter by Pam Holland, President, TechMoxie

Even if you have not yet ventured into the world of Social Media, there is much to learn about how it is shaping communications in personal relationships, business, government and, of course, politics. Join us for a tour of and critical look at the most popular social media sites including Twitter, Facebook, and Instagram. We will explore the benefits – and risks – in using these sites for breaking news, promoting the arts, research, social connection and communication. Pam will explain many of the new terms that are cropping up along with the new technologies such as hashtag, tweet, and follow. Bring your questions!

After more than 20 years as a business lawyer specializing in compliance and risk management, Pam founded TechMoxie out of a love of technology and a passion for simplifying the complex. Her work as an attorney included representing clients on technology initiatives and process improvements that require aligning business needs and legal risk. Pam founded TechMoxie to help businesses and individuals keep up with every day technology. TechMoxie develops and delivers classes and provides individual consulting and coaching on business applications, personal technology and best practices for online privacy and security. Pam’s teaches seniors and professional caregivers how to recognize and respond to phishing, scams, password best practices as well as steps to take assure adequate back up and safe storage of sensitive non-public information.

Pam obtained a B.A. from the University of Massachusetts in 1984 and a J.D. from the Columbus School of Law at The Catholic University of America in 1988. Pam recently served on the board of directors of A Wider Circle in Silver Spring, Maryland and is active in a number of community organizations including Rotary International, the Bethesda Chamber of Commerce, and the Montgomery County Vital LivingNetwork.

Pam oversees curriculum development and manages a wonderful team of tech coaches who share her love of helping older adults get the most out of their technology.

### September 28, 2016 (Arlington) Technology & PC Help Desk

Extended Question and Answer session; discuss topics of interest, share knowledge and get help with technology issues.



### October 15, 2016 (Fairfax)

#### Notice of Annual Meeting and Officer Election

Per Article V, Section 1 of the PATACS Bylaws ([http://www.patacs.org/orgdocs/by-laws\\_patacs\\_2012\\_v7\\_120502.pdf](http://www.patacs.org/orgdocs/by-laws_patacs_2012_v7_120502.pdf)), notice is hereby given that the Annual Meeting of the organization will be held at 1 PM ET on October 15, 2016 at the Osher Lifelong Learning Institute Tallwood facility, 4210 Roberts Road, Fairfax, Virginia in room TA-1.

Per Article VI, Section 1, members in good standing shall elect PATACS Officers for a two year term at the Annual Meeting. The Officer positions are President, First Vice President, Second Vice President, Treasurer, and Secretary.

The notification and voting process are described under Article VII.



Watch for the election ballot with the slate of candidates in your e-mail, or vote in person at the meeting. Write-in candidates are accepted.

### Learn in 30: Amazon Echo by Lorrin Garson

### Presentation: Wearable Computing by Vivian Motti, George Mason University

### November 19, 2016 (Fairfax)

#### Learn in 30: HD Sentinel by Ray Parker

### Presentation: Voice Command of iDevices/Android by Cherie Lejeune

## If You Missed It

by Geof Goodrum

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If you can't make a meeting in person, remember that members can participate in meetings remotely (and at no additional charge beyond your Internet connection service) via Zoom teleconferencing. See <http://zoom.us/>, for Apple® macOS™ and iOS, GNU/Linux®, Google Android™ and Microsoft® Windows® clients. Details are provided in e-mailed meeting announcements.

Remember: you must be physically present at the end of the meeting to be eligible for door prizes.

### July 16, 2016 (Fairfax)

Paul Howard announced that the August 20<sup>th</sup> Fairfax meeting will be online-only via participation in the APCUG Virtual Technology Conference (VTC, <http://apcug2.org/apcug-2016-summer-virtual-technology-conference-rtc21/>). As previously announced, parking lot construction is scheduled to close the OLLI meeting site in August, and we found too much red tape and potential costs to meet at the Fairfax County Government Center. Paul summarized topics in the two simultaneous VTC meeting tracks, including Facebook: Friend or Foe, how technology changed how we listen to music, and upgrading your laptop. The VTC uses the same Zoom teleconferencing application that PATACS uses. Gabe Goldberg recommended Zoom as an easy to use app.

Paul noted that it costs \$200 per year to provide the snacks, sodas and coffee during the meeting break in the Social Annex, and we need more contributions to the OLLI tip jar there to cover this expense as well as a party once per year.

### Q&A Session



Q: I want to upgrade from Windows 7 to Windows 10. Where do I find the upgrade?

A: If you have been applying Windows 7 updates

and haven't disabled the upgrade, click on the "tilted" Windows icon in the notification area to install Windows 10.

Q: Is Windows Defender ([https://en.wikipedia.org/wiki/Windows\\_Defender](https://en.wikipedia.org/wiki/Windows_Defender)) as good as other antivirus programs?

A: Which one is best is debatable. Everybody has a favorite, but you can find a problem with any of them. Paul Howard uses Symantec/Norton products, but a Google researcher found a major vulnerability recently ([http://www.theregister.co.uk/2016/06/29/symantec\\_enterprise\\_endpoint\\_project\\_zero/](http://www.theregister.co.uk/2016/06/29/symantec_enterprise_endpoint_project_zero/)).

What's best today may not be best tomorrow. You may not get support with the free versions. Stan Schretter noted that members of OLLI can get licensed antivirus software at no charge through George Mason University (<https://itservices.gmu.edu/downloads/index.cfm>). Geof Goodrum said that Internet Service Providers sometimes provide licensed security software to customers (e.g., <https://constantguard.xfinity.com/>). [Ed. One site that tests and rates antivirus products is <https://www.av-test.org/en/>.]

Comment: One attendee uses and recommends 1Password software (<https://1password.com/>) to store all of his passwords. He said that it works well and has good support. Paul Howard prefers RoboForm (<http://www.roboform.com/>) and also suggested LastPass (<https://lastpass.com/>), both from companies based in Fairfax, Virginia.

Q: Is there any place to forward scam e-mails?

A: Complaints about scams, ripoffs, identify theft, etc. can be filed with the US Federal Trade Commission at <https://www.ftccomplaintassistant.gov/>. You can also forward (do not cut & paste) original unsolicited e-mail to spam@uce.gov. Scams related to Federal tax returns should be reported to the US Department of the Treasury, <https://www.treasury.gov/services/report-fwa/Pages/ReportFWA.aspx>.

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Comment: An audience member received an e-mail notice from the Virginia Department of Environmental Quality that her car did not need an emissions inspection, but included a link to pay the fee. [Ed. Always be suspicious of links in e-mail. See [http://www.pcworld.com/article/248963/how\\_to\\_tell\\_if\\_a\\_link\\_is\\_safe\\_without\\_clicking\\_on\\_it.html](http://www.pcworld.com/article/248963/how_to_tell_if_a_link_is_safe_without_clicking_on_it.html).] This notice appears to be tied to Virginia's On-Road Emissions Program (<http://www.deq.virginia.gov/Programs/AirCheckVirginia/ForMotoristsVehicleOwners/OnRoadEmissionsProgramFAQ.aspx>). During the discussion, Geof Goodrum noted that his 2002 Honda Insight hybrid is exempt from the biennial Virginia emissions inspection (<http://www.deq.virginia.gov/Programs/AirCheckVirginia/ForMotoristsVehicleOwners/VehicleEmissionsInspectionFAQ.aspx#hybrid>).

Comment: Gabe Goldberg offered that the Fairfax County Police Department website (<http://www.fairfaxcounty.gov/police/>) and Twitter account (<https://twitter.com/fairfaxpolice>) have a lot of useful information, including reports on helicopter activity.

### Learn in 30: Android Apps on a PC? by Stan Schretter



Stan Schretter stated up front that he is an Apple person and doesn't use Google's Android operating system (OS) very much. He noted that Google funds two thousand Android developers, has seven to eight times as many apps than Apple, but Apple makes more money from apps.

Jide Co, Ltd (<http://www.jide.com/>) developed a version of the Android OS called Remix OS for various devices. Stan has a tablet running Remix OS that he prefers over Google's Chrome (web browser-based) OS for taking notes in class. The tablet looks much like the original Microsoft Surface tablet, but is rather heavy. The cost is about \$200 with keyboard. There are icons on the bottom of screen and more can be added to the desktop. It also has a file browser, supports cut &

paste, and items can be moved with the touchscreen or with a mouse. The Remix OS supports automatic updates, is easy to use, and supports apps multitasking—Stan mentioned running three different videos simultaneously.

Jide also sells the Mini (<http://www.jide.com/mini>), a little box running Remix OS that can attach to a HDMI display and costs about the price of a Raspberry Pi [Ed. The 2GB RAM version sells for \$50-\$70]. Stan suggested adding a Bluetooth keyboard and mouse.

Jide released a free download version of the Remix OS for x86-based PCs that can be run from a USB thumbdrive without installing to a hard drive. When asked why would someone would do that, Stan replied that Remix OS would be useful on netbooks and for an inexpensive PC. Paul Howard commented that it would be worth running Remix OS on an old Windows XP netbook, which otherwise should not be connected to the Internet. There is also a Remix OS for XDA supporting various mobile devices and Single Board Computers.

Comment: It seems that there is more malware for Android. Stan replied that the Android OS was not designed for malware prevention and he does not recommend using it for sensitive applications (banking, financial, etc.). [Ed. That characterization is a bit harsh; Apple iOS has had significant vulnerabilities while Android has security features and anti-malware apps, too. Regardless of platform, be careful what apps you run (check history and user ratings) and the permissions granted to the app, only use official app sources, and use devices that receive regular security updates.]

Q: Is Remix OS an alternative for a kid's PC?

A: Remix OS is good for playing around with, and can help kids who don't have a smartphone become familiar with the technology.

Stan recommended that PC users should keep an open mind and give other operating systems a try.

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## **Presentation: Digital Storage by Lorrin Garson**

Lorrin Garson gave another thorough, well-researched presentation based upon his forty years of experience with information technology. All of us use disk drives of one type or another regardless of the computer type. Lorrin provided an overview of devices that are used for storage with a focus on consumer products, with a summary of pros and cons, prices, and a glimpse at future storage technology.

How much storage do you need? What kind? Lorrin started with an example from his computer, which has a 500 Gigabyte (GB; one GB is roughly equivalent to one billion text characters) Solid State Drive (SSD), of which 100 GB is used by his personal files. Lorrin also uses external 2 Terabyte (TB; one TB is roughly equivalent to one trillion text characters) USB 3.0 drives for backup and storage, with 570 GB of photos on external storage.

Optical media include Compact Discs (CDs) and Digital Versatile Discs (DVDs), which are not used as much anymore. [Ed. the convention is to refer to spinning magnetic media as “disk” and optical media as “disc”.]

Magnetic storage media includes Hard Disk Drives (HDDs), tape (mostly business use), and floppy disks. Lorrin noted that floppy disk drives are available with Universal Serial Bus (USB) connectors if you need to access data on floppy disks. IBM introduced digital tape in 1952 with a storage capacity of 2 MB per tape. Tape storage is still widely used by large businesses because it is inexpensive for storing large volumes of data, but data recovery is slow.

Lorrin noted that IBM produced the first hard disk drive in 1956, which stored 3.75 Megabytes (MB), and discussed factors affecting price and performance with sample prices from February (when he first prepared the presentation). The

“sweet spot” was 2-3 TB capacity drives for \$95-100. Lorrin also produced an amusing and enlightening comparison of the change in price per TB since 1979 and how low car prices would be if they paralleled the drop in disk drive prices per unit storage. Lorrin also showed a life expectancy chart and failure rates by manufacturer for HDDs that showed half survive for six years.

Solid State (all electronic) devices include SSDs, USB thumb drives, and memory cards typically used in mobile devices such as cameras, phones, and music players. Thumb drives use USB connectors; but come in many shapes (Lorrin showed examples molded to look like an actual thumb and another built into a pocket knife).

There are thumb-drives that feature built-in encryption to secure data in case of loss or theft, but these are much more expensive and there are other ways (e.g., encrypted filesystems, zip file utilities) to encrypt files on commodity drives. Lorrin found the thumb drive “sweet” spot (i.e., (lowest cost per unit storage) was at 256 GB capacity. Memory cards come in many different varieties, but are dominated by Secure Digital High-Capacity (SDHC) and Secure Digital eXtended-Capacity (SDXC). The sweet spot is 32 GB for SDHC and 128 GB for SDXC.

SSDs are very fast, quiet, low power, and have no moving parts, but they cost about seven times the cost of an equivalent size HDD. SSDs do wear out because the solid state memory has a finite number of writes. A built-in process called wear leveling distribute the writes to maximize life of the device. There is also some controversy over whether data deterioration will occur if the drive is left unplugged. However, SSDs are likely to last as long as the computer. Lorrin presented a table comparing SSDs and HDDs, and found the “sweet spot” was 240-512 GB SSDs. There was a question about the shelf life of a HDD left in the box. Gabe Goldberg recalled advice from Keystone Computer that HDD lubricant wears away and the drive should be replaced after five years.

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Hybrid drives (SSHDs) combine HDDs with solid state memory to improve performance for frequently accessed files while avoiding the high cost of a pure SSD.

Common hardware interfaces for disk drives include the older Parallel AT Attachment (PATA) and newer Serial AT Attachment (SATA). The SATA interface transfers data at up to 6 Gigabits (Gb; roughly one-tenth of a GB) per second. Other interfaces include external USB, external SATA (eSATA), Gigabit Ethernet, FireWire, and Thunderbolt. As the USB specification evolved, the maximum transfer rate increased from 12 Megabits per second (USB 1.0) to 480 Megabits per second (USB 2.0) and 4.8 Gigabits per second (USB 3.0), and the new USB-C specification supports up to 10 Gigabits per second. The USB physical connectors also changed. eSATA is used for some external hard drives (Paul Howard mentioned that Verizon specifies eSATA drives to expand capacity of their FiOS digital video recorders). The Firewire interface was once popular but is obsolete now. Thunderbolt is used mostly on Apple hardware used for graphics design applications. Of these, USB-C is likely to dominate. Network Attached Storage (NAS) is available with Ethernet (wired) and wireless connections. Lorrin noted some things to consider when buying a NAS storage device, such as providing more than one drive bay to allow for a backup drive. Lorrin also provided a table of models. There are Wireless Hard Disk Drives from 16 GB to 4 TB capacity, which are a type of NAS that connect via the WiFi 802.11b/g/n/ac protocols. NAS drives also replaced Microsoft's Windows Home Server, which never caught on in the consumer market despite having more features.

Lorrin discussed Redundant Array of Independent Disks (RAID) that allows multiple disks to be merged and provided a table of the different modes available to provide better performance, reliability or flexibility than a single disk. RAID 1 (mirroring) is the most common mode for home use, which writes the

same data to two disks simultaneously so there is a backup copy if one drive suddenly fails. [Ed. Note that file deletions also occur on both disks simultaneously, so you still need backup software.]

Lorrin noted some future storage technologies. New SSDs will have capacities of 10 TB, use 3D NAND memory chips, and have greater durability [Ed. Technology moves quickly. How about a 100 TB SSD? [http://www.theregister.co.uk/2016/08/10/toshiba\\_100tb\\_qlc\\_ssd/](http://www.theregister.co.uk/2016/08/10/toshiba_100tb_qlc_ssd/)]. These will eventually show up for home use. NAND (negative “and” logic) chips from Micron are 1,000 times faster than current chips, but interface standards must keep up to prevent a bottleneck. Deoxyribonucleic acid (DNA) can be used for data storage, is very stable, and has a storage life for a million years, which gives it potential to store archival data offline. Lorrin provided a description of how DNA nucleotides bond, and said that 700 TB of data could be stored in one gram of DNA. Although DNA is not cost effective currently, this will change. There is also holographic storage in quartz, which can store 360 TB in the space of a CD with life expectancy of 13.8 billion years.

Below are some of the questions from the audience.

Q: What storage media is CD/DVD migrating to?

A: Online streaming is replacing CDs and DVDs.

Q: Are optical drives being replaced?

A: Apple no longer includes an optical drive in their computers. Software is delivered via download. Optical media no longer has enough storage capacity to be used for backup.

Q: Are “portable” drives more robust than external drives?

A: Not sure. [Ed. According to About.com (<http://peripherals.about.com/od/removablestorage/a/3-Tips-For-Buying-A-Portable-Or-External-Hard-Drive.htm>), an external drive has a separate power source, whereas a portable drive is powered by the computer it is attached to.]

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Q: How long do CDs and DVDs last?

A: High (or archival) quality media lasts up to 100 years, but cheap ones do not last as long.

Comments: Gabe Goldberg noted that a presentation on hard drive hygiene is scheduled for the November meeting in Fairfax. Geof Goodrum said that SSDs can fail with little warning, while HDDs may give warning signs before failing [Ed. I was oversimplifying the SSD report at <https://techreport.com/review/27909/the-ssd-endurance-experiment-theyre-all-dead>; SSDs and HDDs alike may or may not give warnings before failing]. Regardless, always keep a backup of your important data.

Lorin's presentation is posted on the PATACS Recent Meetings page (<http://patacs.org/recmtgspat.html>).

## Open Source Software of the Month

by Geof Goodrum

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**crosti/Stitch Designer** – v1.13.2. <https://sites.google.com/site/crostiapp/>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® macOS™, Google Android and GNU/Linux® by Sergey Levin. This tool allows you to make your own unique cross stitch scheme from a custom image. You can resize and rotate the image, reduce the number of colors, change image palette, make cross stitch



scheme, preview it, save and print. Cross stitch scheme edits include changing colors and icons, adding new color, color fill, scheme pixel draw, lines and half-stitches. Features include:

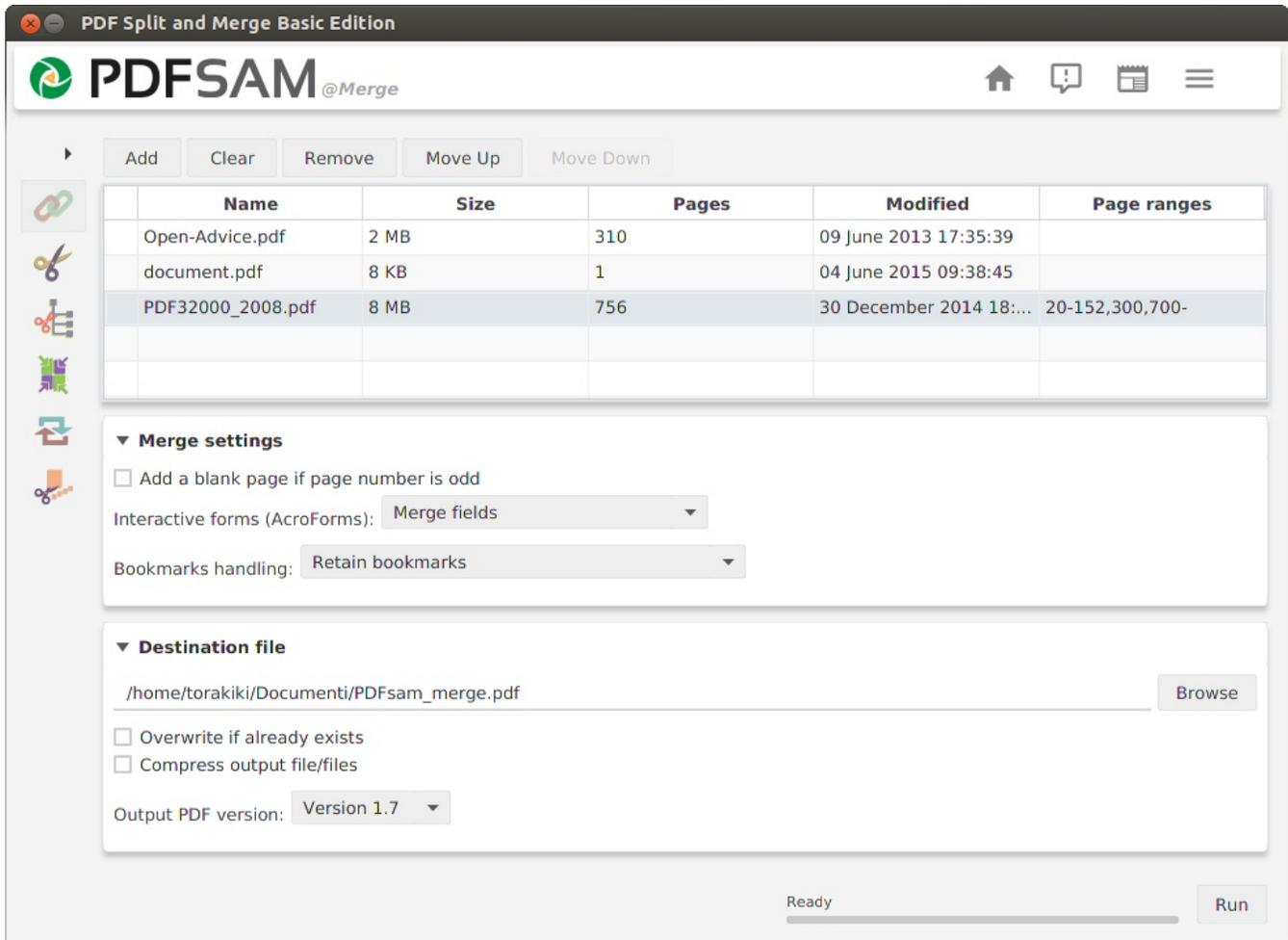
- Convert custom image to cross stitch scheme
- Edit cross stitch scheme
- Save and print the scheme that you created
- Input pictures: BMP, GIF, ICO, JPEG, JPG, MNG, PBM, PGM, PNG, PPM, SVG, TIF, TIFF, XBM, XPM
- Output cross stitch scheme: BMP, ICO, JPEG, JPG, PNG, PPM, TIF, TIFF, XBM, XPM, PDF, CST (crosti scheme text file)

**jGnash** – v2.24.0. <https://sourceforge.net/projects/jgnash/>. Free GNU General Public License source code and executables for Microsoft® Windows®, Apple® macOS™ and GNU/Linux® by Craig Cavanaugh. jGnash is a cross platform personal finance application written in Java. Features include:

- Double Entry Accounting with reconciliation tools
- Budgeting with multiple scenario options and export to spreadsheet capability
- Investment Accounts and automatic import of Stocks, Bond, and Funds price history
- Nestable accounts with automatic rollup of totals and intelligent handling of mixed currencies
- OFX, QFX, mt940, and QIF import capabilities
- Reminders and automatic transaction entry and notifications
- Intelligent handling of multiple currencies and exchange rates with automatic online exchange rate updates
- Printable reports with PDF and spreadsheet export capability
- XML and relational database file formats

**Kernel Source** – v4.7. <http://www.kernel.org/>. Free GNU General Public License source code for all platforms by the Linux community.

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Above: PDFsam Merge menu for PDF files

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**PDFsam** – v3.1.0.

<https://sourceforge.net/projects/pdfsam/>. Free Affero GNU Public License source code and executables for Microsoft® Windows®, Apple® macOS™ and GNU/Linux® by Andrea Vacondio. PDF Split and Merge (PDFsam) is an easy-to-use desktop tool with graphical, command line and web interfaces. Features include:

- Merge PDF files together
- Split PDF files specifying the page number
- Split PDF files specifying the level of bookmarks
- Split a PDF in files of the given size
- Rotate PDF files
- Mix two PDF files taking pages alternately
- Extract pages from PDF files

**SuperTuxKart** – v0.9.2. [https://supertuxkart.net/Main\\_Page](https://supertuxkart.net/Main_Page). Free GNU General Public License source code and executable for Microsoft® Windows®, Apple® macOS™ and GNU/Linux® by Joerg Henrichs, Marianne Gagnon, Jean-Manuel Clemençon and the SuperTuxKart Team. SuperTuxKart is a 3D open-source arcade racer with a variety characters, tracks, and modes to play, focusing on fun and ease of play. Features include:

- Race with Tux and friends
- Explore several tracks
- Play against AI or in split-screen mode against your friends
- Play in various modes, including Time Trial, Grand Prix and 3 Strikes Battle

## Windows 10 Tip: Disable a Touchpad

by Leti Labell

Member, Potomac Area Technology  
and Computer Society



You can disable your laptop's mouse touchpad whenever you have an external mouse connected to your computer. Select "Settings" under the Start Menu, then select "Devices (Bluetooth, printers, mouse)". Click on "Mouse & touchpad." Scroll down, and you will see "Leave touchpad on when a mouse is connected." Click to turn this option OFF.

## Enliven Documents with Themes

by Nancy DeMarte

1<sup>st</sup> Vice President, Sarasota Technology User Group, FL  
October 2015 issue, Sarasota Technology Monitor  
www.thestug.org  
ndemarte (at) Verizon.net

If you often find yourself creating documents in Word or spreadsheets in Excel, you probably use the same font and layouts most of the time. You would be surprised how lively and stylish these files could be if you applied a theme to them. Themes in Word and Excel are Style sets that coordinate the color scheme, fonts, line and paragraph spacing, and effects. The Themes gallery is located on the Design tab in Word and the Page Layout tab in Excel. I will use Word 2013 as an example of how you can apply and customize themes in your documents.

### Choose and Apply a Theme

The default theme in Word and other Office programs is appropriately named "Office," but you can apply a different theme to a document either during its creation or after.



For example, I opened a blank document, clicked the Design tab, then Themes (left side of the ribbon), to open the Themes gallery. I chose the "Ion" theme, although I could have browsed for more online. A group of Styles that coordinate with this theme appeared in the ribbon. I chose a colorful one called "Lines (Simple)" and began to create my document.

First, I typed the title and highlighted it to display the Font toolbox just below it. I clicked Styles (bottom right) and selected the Title style, which changed my title to a maroon color and 40-point text. The title seemed too large, so I reduced the font size to 24 points. All these font changes can also be made on the Home tab – Font group.

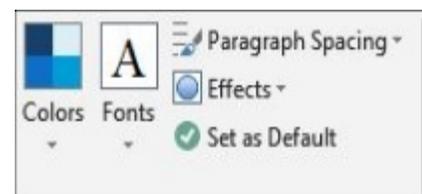
Next, I typed an introduction and my first heading, highlighted it, chose Styles from the font toolbox again, and picked Heading 1. It also was a maroon color, 18 points, and included a line below it. I changed the size to 14 points to be consistent with the new title size.

Then I typed the body of the document. After I had typed the first line of text, I clicked inside a word and learned that the theme's body text was Century Gothic, 10.5 point, Normal style.

Just for fun, I added a couple of shapes from the Shapes gallery (Insert tab – Shapes) Sure enough; they too were a maroon color, keeping with the theme.

### Customize and Save a Theme

Next, it was time to experiment with changing a few of the elements of the theme. With my



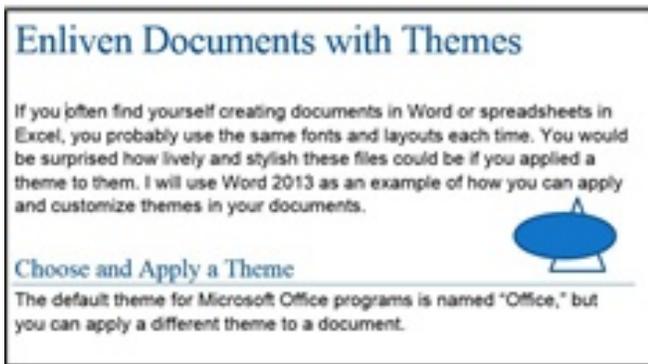
document open, I clicked the Design tab and then Colors, which revealed a menu of color schemes, each which included several coordinated colors. I clicked "Blue" and immediately found that all my maroon-colored features had turned a medium blue. Then I clicked Fonts and chose "Times New

*(Continued on page 11)*

*(Continued from page 10)*

Roman – Arial.” The title and all the headings became the Times New Roman font, while the body text changed to Arial.

With my cursor still in the document, I clicked Paragraph Spacing, which displayed a list of preset distances between lines and paragraphs. Hovering my mouse over Default showed my theme’s spacing. I hovered my mouse over each of the choices to preview how it would affect my document. I decided on the Open spacing set, which added a little more space between lines and paragraphs. Because I had only a few objects or shapes in this document, I did not change the Effects, but clicking that icon showed me what changes were possible.



Now it was time to save this custom theme. I clicked the Design tab, Themes button, and selected “Save Current Theme” at the bottom of the gallery. I typed a name, “My Ion,” in the dialog box and clicked Save. This put my modified theme into the Custom area above the Theme gallery. The theme was also stored as MyIon.thmx in a special Document Themes folder.



## Two Important Cautions

1. Don’t confuse saving a theme with setting it as the default. If you save your custom themes, you have the choice of when to use them. If you set a custom theme as the default, it will affect all

future documents and may give you some unexpected results.

2. The Office theme is different from the rest in the theme gallery in that it affects all of the Office applications. If you make a change to the Office theme, such as changing the background from white to gray, and set it as the default, it will affect all programs in your Microsoft account, including those on other computers. However, saving your own custom themes in Word or Excel can be a handy way to give your documents some style and avoid re-creating a favorite theme each time you need it.

## Internet Browser Tools

by Jim Cerny

Columnist, Sarasota TUG, FL

August 2015 issue, Sarasota Technology Monitor  
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The Internet is a tremendous resource for everything. It is probably the number one reason for having a computer – to get to the Internet. In addition for paying for access to the Internet, you need a free program called an Internet “browser” that allows you to view the Internet web pages. One of the more popular browser programs is Internet Explorer (by Microsoft) which comes free on all Windows computers. Other free browser programs are Safari, Google Chrome, and Firefox which can be downloaded from the Internet for free. Using any of these browser programs is easy but, as usual, there are many options and tools available to you. This article will introduce you to the purpose and use of “tabs” (on Internet Explorer).

Along the top of your Internet browser program window will be a row that will contain one or more “tabs” (please see the illustration).

Just to the right of the web page address box you can see that I have three tabs, “Golf driv...”, “Gmail”, and “HERSH..”. If I move my mouse over any of these tabs (hover your mouse, do not click it) I will see the full title of that web page and its address. If I click on any of these tabs, I will see that web page right away. So, you could say that

*(Continued on page 12)*

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tabs are an easy and quick way to go to a specific web page without having to open a new browser window or using “favorites”.

Perhaps you have never created a tab (that you know of, anyway) and you are wondering how

you get them. Web pages are designed to have the ability to send you to another web page with the click of your mouse.

Certain items you see on a web page, such as colored text, underlined text, photos, or

headlines, etc. are called “hot links”. Clicking on any such link will display a new web page – the web page to which that link directs you. The new web page address will appear in the “address bar” at the top of the window. In the old days, clicking on a hotlink would always open that new web page in a new window OR display that web page in your existing window. Today many hotlinks will add a new “tab” while taking you to that page. This way, if you visit other web pages, you can go back to a web page by clicking on its tab -- you do not have to “hunt” for it by clicking on the “previous web page” arrow multiple times or open your history list. Basically, it is a shortcut to a web page. You do not have to use “tabs” if you do not want to, using them is optional. When you click on a hot link, you do not know in advance how that new web page will appear – it may be in a new window, a new tab, or in your existing window. It is not unusual to use the Internet, exploring and clicking away, and ending up with several or many new tabs.

You can create a new tab yourself if you wish just by clicking on the “New tab” (a blank tab) as shown in the illustration. After you click to create the new tab you will have to go to the web page you want for that tab, such as by entering the address in the address bar. To remove or



“close” any tab, move your mouse to that tab and click on the small “X” that appears on the right side of that tab. You should not have more than a few tabs at any one time. As new tabs are created (either by you or by clicking on links) they become more squeezed together and are harder

to read. Of course you can hover your mouse on any tab to see what it is if you wish. When you exit your web browser, most likely the tabs that have been created during your previous session will be gone. If you

want to make some tabs permanent, so they appear every time you open Internet Explorer, you can do that by going to Tools – Internet Options – General – then add the web pages you want as tabs in the “Home page” box. I don’t use tabs that much, I still like and use “favorites” to go to my favorite web pages. But I did create a permanent tab for my Gmail web page which I use every time I do email.

I do recommend that you close all program windows when you are through using that program (such as your Internet browser program) and shutting down your computer at the end of the day. This prevents programs staying open over long periods of time and building up multiple things like tabs, links, history, etc., until there are just too many clogging up your screen. If you do leave your computer on for long periods of time, you may want to check to see how many tabs are in your window and delete the ones you do not want.

If you are interested in using tabs in your browser program and want to learn more about them, please use Google and ask specifically “How do I use tabs in Internet Explorer on Windows X”, or for whatever browser you are using. Tabs can be helpful but at least they are optional (so far, anyway).

## Help Wanted: Meeting Speakers

Finding presenters for our meeting programs is difficult—your help in the effort to enhance the value we all receive from PATACS membership would be greatly appreciated!

Please consider speaking to your friends at an Arlington or Fairfax meeting. We'd love to feature your take on a smart phone or tablet app. A presentation on these or other topics of interest to you would undoubtedly be welcomed by your PATACS colleagues. We have space in our schedule for 15, 30, 60 and 75 minute discussions—what are you waiting for?

We also have ready-made paragraphs you could use in e-mail communications to help us find speakers. Contact: [director2\(at\)patacs.org](mailto:director2(at)patacs.org)



## Shopping on Amazon.com? Don't Forget PATACS!

If you shop online at Amazon.com, don't forget to start each session by clicking the Amazon link on the PATACS home page, then continue shopping on Amazon as usual. Doing so earns PATACS a 4 to 6.5% commission on your purchase at no additional cost to you.

Thank you for supporting your user group!

## PATACS Email Discussion List



Join the PATACS members-only email list to discuss topics of mutual interest, ask and answer questions, share resources, convey news, and increase our sense of shared community with fellow members.

Visit <https://groups.yahoo.com/neo/groups/PATACS-b/info> for more information.

## Special Membership Promotion



Current members who bring a new member to the organization will receive a six month extension of their membership. New member is

defined as someone who has not been a member in the thirty-six months prior to month of received application. The new member should list your name as the 'source' of their membership on the application form (pick up at meetings or download from <http://patacs.org/membershipat.html>).

## APCUG Resources

The Association of Personal Computer User Groups (APCUG) is a worldwide organization that helps groups devoted to the world of technology including computers, tablets, smartphones, digital photography, genealogy, etc. by facilitating communications between member groups and industry vendors.

## 2016 International Technology Conference

October 21, 22 & 23, 2016

Palace Station Hotel & Casino, Las Vegas

Join us for our 2016 Tech Conference and learn about the ever-changing world of technology. Whether you are using a Windows-based or Linux computer, a Chromebook, Android or Apple device, this is the conference for you.

Conference Information:

<http://apcug2.org/apcug-2016-conference/>

Registration includes:

- Lunch and dinner on Saturday
- Lunch on Sunday
- Welcome swag bag with sponsor items, various discounts and special pricing order forms
- Your choice of 20+ presentations
- Door Prizes
- Networking with other tech club officers and members
- Up close-and-personal time with sponsors at the Saturday night Expo

IMPORTANT DATES

- \$85 Early Bird registration ends October 4
- \$100 registration October 5 – October 20
- \$125 on-site registration
- Palace Hotel Conference rate ends October 4

## JCA SeniorTech Training

JCA SeniorTech Computer Centers offer diverse senior-friendly (50+) technology classes (personal computers, tablets, smartphones, online security, etc.). Offerings include beginner and intermediate computer classes in Windows 7, Windows 8, Windows 10, Excel, iPad and iPhone, email, photos, and social media.

SeniorTech is a service of the Jewish Council for the Aging (JCA). Within the limits of its resources, JCA serves people of all faiths and from all walks of life.

For additional information about SeniorTech courses, call 240-395-0916 or 703-652-1512. A course catalog is available for download at <http://www.accessjca.org/programs/technology-training/>.

### Washington DC Area Training Locations

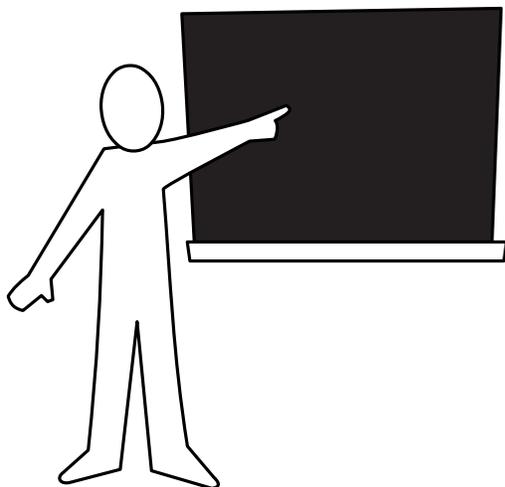
Asbury Methodist Village, 409 Russell Ave,  
Gaithersburg, MD, 301-987-6291

JCA Bronfman Center, 12320 Parklawn Drive,  
Rockville, MD, 301-255-4200

Microsoft at Westfield Montgomery Mall, 7101  
Democracy Blvd, Bethesda, MD, 301-765-3080

Microsoft at Tysons Corner, 1961 Chain Bridge  
Rd, McLean, VA 22102, 703-336-8480

Crystal City Shops, 1750 Crystal Drive, Suite  
1638B, Arlington, VA, 703-941-1007  
<http://va-seniortech.org/>



## Micro Center® In Store Clinics

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Micro Center stores host free events called “In Store Clinics.” The clinics cover a wide range of topics. All Micro Center store locations follow the same schedule of topics.

A link for store locations is at the top center of the home page, [www.microcenter.com](http://www.microcenter.com). For those in the Washington, D.C. area, the only store in Virginia is in the Pan Am Plaza at 3089 Nutley Street, Fairfax, VA 22031, phone (703) 204-8400, and the only store in Maryland is in the Federal Plaza at 1776 E. Jefferson #203, Rockville, MD 20852, phone (301) 692-2130.

Micro Center Clinics are held on most weekends, except during holidays. The same topic is usually presented on both Saturday and Sunday. Topics may change and clinics may be cancelled without notice. Please verify the schedule with the store before leaving and register online for e-mail updates (<http://www.microcenter.com/site/stores/instore-clinics.aspx>).

Signing up in advance reserves a seat, recommended as space is limited. This can only be done at a store, either at the Tech Support or Customer Support area.

### September-October 2016 Schedule

Sep 3 & 4: Smartphones & Tablets

Sep 10 & 11: Word & Excel—What’s New

Sep 17 & 18: Build Your Own

Sep 24 & 25: Windows® 10 Basics

Oct 1 & 2: Mac OS X Tips & Tricks



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## September 2016 PATACS Event Calendar

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Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1 Emma M. Nutt Day 	2	3
4	5 Labor Day 	6	7 7-9pm Arlington General Meeting	8 National Ampersand Day &	9	10
11	12 Video Games Day 	13	14 7-9pm Online Zoom Meeting	15	16	17 Software Freedom Day 12:30-3:30pm Fairfax General Meeting
18	19 Talk Like a Pirate Day 7-9pm Arlington Board Meeting	20	21	22 Organize Cables and Plugs Day 	23	24 November Newsletter Articles Due
25	26	27	28 7-9pm Arlington Technology & PC Help Desk	29	30	

Arlington: Carlin Hall Community Center  
 5711 4<sup>th</sup> Street South  
 Arlington VA 22204

Fairfax: Osher Lifelong Learning Institute  
 4210 Roberts Road  
 Fairfax VA 22032