

## Welcome New Member

PATACS welcomes the following new member.

Tom Urman

## Upcoming Meetings

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

### May 20, 2017 (Fairfax)

#### Learn in 30: Flightradar24

Presented by Bill Walsh



Bill will demonstrate Flightradar24.com, one of several available websites that let you graphically follow aircraft in flight, with detailed parameters of the plane and flight route. Founded as a hobby in 2006 by two Swedish aviation enthusiasts, the site collects data from multiple sources, with increasing reliance on aircraft use of what is known as ADS-B transponder data, an important part of the FAA's NextGen air traffic control system.

Thousands of flights are shown around the world, with aircraft location, speed, origin, destination, etc. being presented. Flights can be selected and tracked onscreen, with many features controlling the program being offered to the user. Because of the use of near-realtime

data, the displays are closer than most to showing aircraft positions, though accuracy is often dependent on reception of transmitted data.

Bill Walsh is the always affable PATACS Secretary, and OLLI and PATACS meeting setup "czar," one of the outstanding volunteers who keeps PATACS running. Bill is a lover of geek toys, and has previously given presentations on radio frequency spectrum and software defined radio, digital audio recorders, and useful software utilities.



#### Presentation: Watching TV on the Internet

Presented by Rick Ellrod

Director, Communications Policy and Regulation Division, Fairfax County

Today's TV's, computers, and mobile devices offer "over-the-top" options to watch movies and TV programs via streaming video over the Internet. Services such as Netflix, Hulu, YouTube, Amazon, Sling TV, and Apple TV provide new alternatives. "Cord-cutters" are replacing or supplementing their cable television subscriptions with such Internet video sources. The Fairfax County Department of Cable and Consumer Services will discuss the benefits and limitations of these options.

Frederick E. Ellrod III (Rick) is Director of the Communications Policy and Regulation Division of Fairfax

*(Continued on page 2)*




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Upcoming Meetings: FlightRadar24, Internet TV.....	1
If You Missed It: Intel Compute Stick, Geohazards.....	2
Musings of an Apple Tyro: Vista Demise, Aging Macs, Sierra Update.6	
Ransomware.....	7
Open Source Software: Jmol, Notepad++, PySolFC, VLC.....	8
Digital Privacy at the US Border.....	11
Google Search Tricks.....	12
APCUG Resources: May 6 VTC, Videos.....	13
JCA Training & Micro Center Clinics.....	14

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*(Continued from page 1)*

County's Department of Cable and Consumer Services. Before joining the County in 2009, he worked as an attorney at Miller & Van Eaton, a law firm representing local governments on cable and telecommunications issues. He helped negotiate the County's 2013 and 1998 Cox cable franchises and assisted with the Comcast franchise renewal in 2005. Previously, he taught philosophy at the Catholic University of America. Rick graduated from Harvard Law School cum laude in 1986 and holds a Ph.D. in philosophy from Boston University (1979).



Rick has resided in the County since 1989. He has published two short stories and is working on a science fiction novel titled House of Stars. Rick also plays the guitar. He is the proud father of David and Karen, and the grandfather of two charming granddaughters.



### May 24, 2017 (Arlington) Technology & PC Help Desk

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

### Help Wanted: Treasurer

Our Treasurer's position is vacant and we need a member to volunteer for this vital position on the PATACS Board of Directors.

This job entails writing about twenty-five checks and making a dozen deposits per year, and preparing the monthly financial report and annual report for the Board of Directors and membership.



Please email your expression of interest to: president (at) patacs.org



### If You Missed It

by Geof Goodrum  
Director, Potomac Area Technology  
and Computer Society  
Director1(at)patacs.org

If you can't make a meeting in person, remember that members can participate in meetings remotely (and at no additional charge beyond Internet connection service) via Zoom

teleconferencing. See <http://zoom.us/> for Apple® macOS™ and iOS, GNU/Linux®, Google Android™ and Microsoft® Windows® clients. The Zoom meeting link is provided in emailed meeting announcements.

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

### March 18, 2017 (Fairfax)

PATACS President Paul Howard was in the spirit of St. Patrick's Day wearing a big, green leprechaun hat and a "Save Water, Drink Beer" T-shirt. Paul reminded the audience about the email discussion group where PATACS members can share information and get advice from experts in the group. Paul created a new web page with more information on the PATACS web site at <http://www.patacs.org/patacsdisclist.html>, which can also be reached from the PATACS home page menu by clicking on the Tech Resources then Discussion Group links.



### Q&A Session

Q: Does anyone have insight into a 3048,2 error reported once by the Norton 360 security application (<https://us.norton.com/360>)? A web page at Symantec, the software publisher, recommends running the Norton remove and reinstall tool.

A: Paul Howard suggested following Symantec's advice. Otherwise, if it is working now, don't bother. Gabe Goldberg, who reported the problem, may contact Symantec technical support for an explanation.

Q: Why does clicking a link in a message try to start a download in Windows 10?

A: We need to see what is being sent. Position your mouse cursor over the link without clicking to see what it really points to [clicking the link will try to download if it is a file type like .pdf or .exe, but beware of malware]. Click behavior also depends upon how the web browser is configured.

*(Continued on page 3)*

*(Continued from page 2)*

Q: How good is Microsoft Windows Defender (<http://www.microsoft.com/en-us/safety/pc-security/windows-defender.aspx>)?

A: Tom Gutnick said that Windows Defender does a decent job; half of his computers are running Defender. Just make sure to keep it updated. [See ratings of antivirus/antimalware products at <https://www.av-test.org/en/>. Also see comments about Windows Defender in <https://www.howtogeek.com/239950/dont-use-your-antivirus-browser-extensions-they-can-actually-make-you-less-safe/>.]

Q: How do I migrate my email from verizon.net to AOL?

A: Verizon is rolling out this change in phases, and will send an email with directions when you need to take action. [Also see <https://www.verizon.com/support/residential/email/migrations.htm>.]

Q: Will I have a problem since I get Internet service from Verizon, but email through FatCow (<https://fatcowhostingtips.com/fatcow-webmail/>)?

A: Only the bellatlantic.net and verizon.net email domains are migrating to AOL. [See Verizon link in previous answer. This migration does not affect other email services, unless that email is forwarded to Verizon email.]

### Learn in 30: Setting up TV and “PC on a Stick” Presented by Mike Pafford

PATACS member Mike Pafford talked about the Intel Compute Stick, which has been available for two to three years. Mike has both the 1.8 GHz (\$120, Win10 Pro) and 2.4 GHz (\$340, Win10 Pro) sticks. These are candybar-sized computers that plug into a TV or video monitor HDMI port and use AC power via an adapter. The new version has a USB 3 port and 4 GB of RAM. The stick comes with an HDMI extender cable. The user provides a USB/wireless keyboard and mouse.



Mike stated assumptions: you have a TV with HDMI input, an electric outlet near TV for the stick's adapter, some knowledge of Microsoft Windows 10, a desire to work while sitting in front of a TV, and willing to use your TV as smart monitor. A wireless network and an Internet connection are optional.



Mike listed what is included with the Intel Compute Stick, and what is optional. Mike added a wireless keyboard with a built-in touchpad. Other options that Mike suggested include a microSD card for storage, a USB hub to allow multiple devices to connect to the one USB port on the stick, a USB webcam, and a lap desk. The stick does not generate much heat, so it does not require a fan.

The stick can be used to surf the Internet with any HDMI TV (not just a Smart TV), stream media from the Internet (only with the higher end stick models), and share applications, web sites, Skype, etc with groups on a large TV. The higher end models support 4K video. Mike said the stick is well-suited for less technical users with easy Windows 10 setup, and may require less effort to support friends and family members.

A stick should appear as another Windows computer when connected to a network, but Mike has not tried this.

Gabe Goldberg suggested that purpose-built devices like the Amazon FireStick TV and Roku might be better for streaming media

*(Continued on page 4)*

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applications. When Mike was asked whether the Google Chromecast can do the same things as the stick, Mike pointed out that Chromecast is for streaming applications only, and cannot run Windows computer applications like the stick.

More information is on the Intel Compute Stick web site (<http://www.intel.com/content/www/us/en/compute-stick/intel-compute-stick.html>). Mike's presentation in PDF format is available for download from the PATACS Recent Meetings web page (<http://www.patacs.org/recmtgspat.html>).

### **Geophysics and Geohazards: Cutting-Edge Science Providing Insight Into Societally Relevant Earth Systems Presented by Andy Frassetto, Ph.D**

Our guest speaker was Dr. Frassetto, a Senior Project Associate for the Incorporated Research Institutions for Seismology (IRIS), where he has worked for the last six years. Dr. Frassetto emphasized how important science is to society.

Dr. Frassetto deployed seismometers to measure earth movement in the Sierra Nevada region as part of the EarthScope Project. The seismometers are two to six feet below surface, and left in place for months to years. Dr Frassetto showed photos of the equipment, including data acquisition, data logger, batteries and disk drive or flash drive. Some unique problems included solar panels that had been shot, and bears opening equipment containers. However, benefits included getting to work in amazing, scenic locations.

The Sierra Nevada Earthscope Project (SNEP) was funded by the National Science Foundation (NSF) over 28 months, involving 97 stations and three Universities. The investigation looked into why the Sierra Nevada mountains are so high and appear very youthful, but are not related to a subduction zone pushing up the land. What processes are operating on a large scale? Using waves from earthquake energy, the seismometer data is used to image a cross section of the earth.

Dr. Frassetto showed a US and world map of IRIS,

NSF, SNEP funded projects. IRIS was founded in 1984 and funded by NSF to collect and distribute seismic data. IRIS was originally a consortium of universities for academic research seismologists, but seeks to democratize research and outreach to the public. IRIS is guided by community proposals to NSF, with staff in Washington DC, Seattle WA, Socorro NM and San Diego CA.

Datasets are often undersampled (i.e., sensors are not located at earthquake/fault sites below earth's surface), which requires novel analyses to answer fundamental questions about how the earth works.

Dr. Frassetto provided some examples of research and applications of seismic data, including the 2011 earthquake in Japan (with video from Tokyo showing ground water seeping up through soil in a Tokyo park, <http://blogs.agu.org/landslideblog/2011/03/17/liquefaction-from-the-sendai-earthquake/>), during which Japan moved eastward. He also mentioned seismic monitoring of Seattle Seahawks football games (<https://pnsn.org/seahawks/>), and showed an animation of wave propagation from the magnitude 8.8 earthquake in Chile, February 2010 [perhaps this video, <https://www.youtube.com/watch?v=Or9a7VsFUFM>]. Public understanding of seismic risk is important, but many popular articles are sensationalized. However, Dr. Frassetto praised a Pulitzer Prize winning article from the New Yorker by Kathryn Schulz dated July 20, 2015, which was well-referenced despite a sensational title (<http://www.newyorker.com/magazine/2015/07/20/the-really-big-one>). Dr. Frassetto also cited the Orphan Tsunami of 1700 about the earthquake and tsunami that occurred in the Pacific Northwest ([http://www.iris.edu/hq/programs/education\\_and\\_outreach/animations/22](http://www.iris.edu/hq/programs/education_and_outreach/animations/22)).

There are episodic little tremor and slip events along the subduction zone in the Pacific Northwest seismic zone, which are now recognized as a shift of stress setting up for the

*(Continued on page 5)*

(Continued from page 4)

next earthquake, detected through the monitoring network.

The US Geological Service (USGS) is working on an earthquake early warning program (<https://earthquake.usgs.gov/research/earlywarning/>) to provide advance alerts for shaking. Seismic P waves are felt first, followed by damaging S waves. This can give seconds to a minute advance warning, enough for automated responses and alerts.

Dr. Frassetto also talked about induced earthquakes. Induced earthquake frequency has increased since 2009 in the central US and Oklahoma, but we don't understand the deep earth structure of Oklahoma, which is very complex and includes deep reservoirs of salt water. The earthquakes are not a direct result of fracking (<https://earthquakes.ok.gov/faqs/>). However, injecting wastewater can reduce friction of faults. Earthquakes have only occurred at higher pressure wells. This is not a new phenomenon; the effects have been known for a long time (documented in a 1968 paper).

The Global Seismic Network is also monitoring nuclear tests in North Korea, which are fairly easy to discriminate from earthquakes due to differences in P and S wave characteristics.

Dr. Frassetto also talked about fake news and alternative geology, mentioning the claims about a "kill zone" around Yellowstone National Park. In truth, Yellowstone is over a hot spot in earth's mantle, which results in partial melt, not magma beneath. It takes a long time to melt rock, and might not provide enough "juice" to erupt. However, underreported is the risk of the Laguna del Maule volcano near Santiago Chile (<http://volcano.si.edu/volcano.cfm?vn=357061>), which Dr. Frassetto believes is the most likely to erupt. The volcano is well-instrumented but not well publicized, and not a lot of resources have been thrown at it.



Solar storms impact the electrical grid on earth, but this depends upon electrical conductivity of earth below power lines that can speed up the aging cycle of equipment. IRIS magnetotelluric stations in the US under the EarthScope Program add a lot of instrumentation and the ability to see into the earth ([http://www.earthscope.org/articles/ES\\_MT\\_data](http://www.earthscope.org/articles/ES_MT_data)). Dr. Frassetto noted that it is easier to install instruments on private land than public.

Dr. Frassetto is concerned over proposed cuts in science programs. The USGS may have a 10.5% budget cut. NSF is not listed in the proposed budget, but a cut is likely 9.8%, and has been under flat funding since 2010, which is effectively a cut. Historically, science research funding was on an increasing trend. Dr.

Frassetto cited collaboration with the National Oceanic and Atmospheric Administration (NOAA) on tsunami warning (<http://www.tsunami.noaa.gov/>).

NOAA has also installed meteorological sensors with seismometers. Other budget impacts could include Greenland glacier activity monitoring, ability to install instruments offshore, environmental monitoring satellites (e.g., NASA's GRACE mission, [https://www.nasa.gov/mission\\_pages/Grace/overview/index.html](https://www.nasa.gov/mission_pages/Grace/overview/index.html)), and monitoring of soil moisture, glacial melt, and sea level.

Q: Was the January 1994 earthquake in L.A. a "blind thrust" ([https://en.wikipedia.org/wiki/Blind\\_thrust\\_earthquake](https://en.wikipedia.org/wiki/Blind_thrust_earthquake))?

A: Blind thrust earthquakes are the most common, and a big problem in the L.A. area [see [https://en.wikipedia.org/wiki/1994\\_Northridge\\_earthquake](https://en.wikipedia.org/wiki/1994_Northridge_earthquake)].

Q: Is the "Big One" coming for the west coast?

A: There are several big ones: San Andreas, Hayward, Cascadia. Recognition of the threat is there and reflected in building codes, but change takes a long time. Warning systems will not be ready for two to three years.



## Musings of an Apple Tyro

by Lorrin R. Garson  
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### The Demise of Windows Vista

On April 11<sup>th</sup>, Microsoft stopped all support for Windows Vista. This means no more security or online technical content updates from Microsoft. See <http://bit.ly/2n5zJDv> and <http://bit.ly/2mzztJh>. If you are still using Vista... you know the old saw about skating on thin ice. Microsoft will cease support for Windows 7 (Service Pack 1) on January 14, 2020; see <http://bit.ly/2ngOvba>.



### Aging Mac Computers

In the last year or so, Apple has largely focused on the iPhone, iPad and Apple Watch—not Mac computers. Shown in Table 1 are the number of days (also expressed in years) since various models of Apple computers have been refreshed. This is as of March 18, 2017. Hopefully we will soon see this situation remedied. Apple computers are falling behind. See <https://imac.macrumors.com>.

Interestingly, Seamus Bellamy, writing in PC World, has decided to abandon his Mac for a PC (see <http://bit.ly/2nvWwGH>; see also <http://bit.ly/2mSYhPG>). One of his numerous complaints is Apple's aging computers. See Seamus' article in PC World entitled "Switching from Mac to PC:

**Table 1: Time (days and years) Since Last Refreshed**

Computer Model	Number of Days	Number of Years
iMac	523	1.4
MacBook Air	741	2.0
Mac Mini	885	2.4
Mac Pro	1187	3.3

Choosing a laptop"; see <http://bit.ly/2nze9W4>. Bear in mind PC World is generally more favorable toward Microsoft than Apple. It will be interesting to see how this plays out.

### Update to macOS Sierra

In early March macOS Sierra 10.12.4 beta 5 was released to developers and public beta testers. Changes to Siri, Dictation, and Apple's PDF API are expected. Night Shift, which is currently available on iOS devices, will be introduced to Mac computers. Night Shift, which adjusts the color of display after sunset reducing bright blue light that can adversely impact human circadian rhythms and make it harder to sleep, will be introduced to Mac computers. Other changes can be expected but this will not be a major OS update.

### MacBook Pro Battery Stamina

Apple claims the battery in this laptop will last up to 10 hours (see <http://apple.co/2nza3Ag>), but there has been grumbling that it doesn't last anywhere near that long. It turns out that with intensive GPU/CPU use the battery lasts around 80 minutes. For details, see <http://bit.ly/2jKUzmm>.

### Google Chrome

If you use the Chrome Browser, look at <http://bit.ly/2kAoYom>. This article in PCWorld is entitled "10 Frustrating Google Chrome Irritations and How to Fix Them". But there's more than that—there are workarounds on how to mitigate some of these limitations.

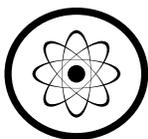
### Quantum Computers

Quantum computing is in the news these days. What is it, other than being mysterious and quirky? In classical computing a "bit" can have two states: "0" or "1"... "yes" or "no", "on" or "off", etc. In quantum computing, a "qbit" (aka "qubit") can have three states "0", "1" and "0 and 1" simultaneously. Quantum computing is based on quantum mechanics that began with Albert

*(Continued on page 7)*

*(Continued from page 6)*

Einstein, Max Planck and other giants of physics in the early 1900's. Why does it matter? Quantum computing has enormous potential for drug design, weather forecasting, communications, "big data" analysis, traffic control and other areas that require massive computer power. The March 11<sup>th</sup>-17<sup>th</sup> issue of The Economist features quantum computing (p.11 and the special section following p. 44, entitled "Here, there and everywhere"). Also see, as examples, <http://bit.ly/2nr7PTL>, <http://bit.ly/2mvYKnq>, and <http://bit.ly/2mMANdw>. Don't expect to have a quantum computer on your desktop or in a tablet anytime soon, but you don't need it for surfing the Web, email and controlling your garage door.



### One Bit on One Atom

On current hard disk drives it takes about 100,000 atoms to store one bit of information. Scientists at IBM's Almaden Lab in San Jose, California have achieved the ultimate. They have managed to store one bit of data on a single magnetized atom of Holmium (Ho). Don't expect to buy a disk drive using this technology at Micro Center anytime soon. It's strictly experimental. See <http://bit.ly/2mxDA9A>.

### Ransomware on Dramatic Rise

According to articles from PC World (see <http://bit.ly/2mC6tBw>) and CIO (see <http://bit.ly/2mQ1g90>), Ransomware attacks rose from 3.8 million in 2015 to 638 million in 2016. The article in PC World contains good advice on how to prevent such attacks and what to do if you get hit.

### KrebsOnSecurity

From time to time I have commented on KrebsOnSecurity (<https://krebsonsecurity.com/>) as an excellent source for information on current security issues. It makes for chilling reading, but I strongly recommend periodic reading of this Web site.

## Ransomware

by Geof Goodrum  
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### What is Ransomware?

Ransomware is a form of malicious software ("malware") designed to render a user's data files (e.g., spreadsheets, documents, photos) unreadable until a passcode purchased from the criminal through an anonymous online payment is entered. The estimated total of ransomware payments in 2016 was \$1 Billion. Wikipedia's description is at [https://en.wikipedia.org/wiki/Ransomware\\_%28malware%29](https://en.wikipedia.org/wiki/Ransomware_%28malware%29).

Ransomware typically infects a system through scripts hidden in email attachments and web pages, and does not necessarily require any action by the user beyond opening a file or visiting a compromised web site (aka a "drive-by" download).

For those interested in a detailed example of how ransomware works, Brad Duncan, a handler at the Internet Storm Center, posted a technical analysis of a specific ransomware infection at <https://isc.sans.edu/forums/diary/CryptoShield+Ransomware+from+Rig+EK/22047/>.

### Responding to Ransomware

With ransomware, the last resort is to reward and encourage the criminals by paying the ransom.

Never attach flash drives or external hard drives to a system infected with ransomware—the ransomware can encrypt files on all attached devices. This will render external backup disks useless for recovery.

The first step is to identify the ransomware, as there are many variants. You should be able to do this from the infected computer if it has an Internet connection. A web site that can help with this is <https://id-ransomware.malwarehunterteam.com/index.php>.

*(Continued on page 8)*

*(Continued from page 7)*

Once identified, there are free tools available to recover files, but not for all variants of ransomware. Follow the instructions. Here is one list of recovery tools:

<https://www.thewindowsclub.com/list-ransomware-decryptor-tools>.

Similar to the sites above, there is a single site sponsored by industry to assist with ransomware identification and recovery:

<https://www.nomoreransom.org/>.

If a recovery tool is not available for the particular ransomware, then the question is whether to restore the system completely from backup, or, if critically important data files are not backed up, whether it is worth the cost to pay the ransom vs. recover or recreate the files from other sources (files in webmail attachments, stored in the cloud, previously shared with friends, etc.). There is no guarantee that paying the ransom will result in file recovery.

If recovery from backup is possible, do a secure erase of the infected media (my preferred tool is the inexpensive Parted Magic bootable utility disk, <https://partedmagic.com/secure-erase/>), or replace the infected drive entirely. Restoring depends upon having a clean boot recovery disk for the backup software and uninfected, verified backup copies. It is worth the time to test the boot disk and verify the backup copies **before** they are needed.

### Protecting Against Ransomware

Remove or disable Adobe Flash and Flash browser plugins (included by default in the major web browsers), as well as Oracle Java (not to be confused with Javascript), if installed. Unpatched vulnerabilities in these two software packages are the most common vectors for ransomware infections. If you must have Flash or Java installed (which is rarely the case), update them as soon as patches are released—enable automatic updates, if available. This includes updating web browser software. However,

ransomware can take advantage of vulnerabilities before patches are available, so there is still a risk if Flash and Java are installed.

**Advanced Users:** There are more advanced techniques to protect against ransomware, such as installing Microsoft's free EMET software (<http://www.microsoft.com/emet>), and browser plug-ins such as NoScript for Mozilla Firefox (<http://noscript.net/>) and ScriptSafe for Google Chrome (<https://github.com/andryou/scriptsafe>). However, these require some technical knowledge and patience to configure and can affect performance of existing applications.

Keep regular backups on external media (e.g., external USB drive), and disconnect media when the backup is complete. As mentioned previously, never connect external media to an infected system.

Do not rely on antivirus/antimalware products to protect against ransomware. These products are reactive, ransomware is designed to evade them, and there is evidence that most of these “security” products actually make systems more vulnerable to malware.

### Open Source Software of the Month

by Geof Goodrum

Potomac Area Technology and Computer Society  
[linux\(at\)patacs.org](mailto:linux(at)patacs.org)

**Jmol** – v13.0. <http://jmol.sourceforge.net/>. Free GNU Lesser General Public License Java source code and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Angel Herraiz, Egon Willighagen, Bob Hanson, Miguel, Nicolas, et al. Jmol is a free, open source molecule viewer for students, educators, and researchers in chemistry, biochemistry, physics, and materials science.

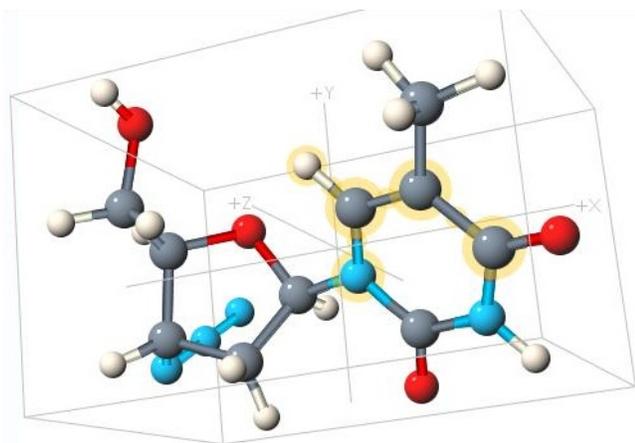
Features include:

- The JmolApplet is a web browser applet that can be integrated into web pages. It is ideal for development of web-based courseware and web-accessible chemical databases.

*(Continued on page 9)*

(Continued from page 8)

- The Jmol application is a standalone Java application that runs on the desktop.
- The JmolViewer can be integrated as a component into other Java applications.
- Multi-language
- Supports all major web browsers: Internet Explorer, Mozilla and Firefox, Safari, Google Chrome, Opera, Konqueror, IceWeasel, ...
- High-performance 3D rendering with no hardware requirements
- See the scripting documentation and also the Jmol Wiki file format page for complete details on file types that Jmol can read. Note that files compressed using gzip will automatically be decompressed.
- Animations
- Vibrations
- Surfaces
- Orbitals
- Support for unit cell and symmetry operations
- Schematic shapes for secondary structures in biomolecules, including DSSR for investigating the secondary structure of nucleic acids.
- Measurements: distance, angle, torsion angle
- Support for RasMol/Chime scripting language
- Exports to jpg, png, pngj (a png image that can be dragged back into Jmol to reproduce the exact model state the image was created from), gif, ppm, pdf, POV-Ray, Gaussian, Maya, vrml, x3d, idtf, web page.



**Notepad++** – v7.3.3. <https://notepad-plus-plus.org/>. Free GNU General Public License source code and executable for Microsoft® Windows® by Don Ho. Notepad++ is a source code editor and Notepad replacement that supports several languages. Based upon the powerful editing component Scintilla, Notepad++ is written in C++ and uses pure Win32 API and STL, which ensures a higher execution speed and smaller program size.

Features include:

- Syntax Highlighting and Syntax Folding
- User Defined Syntax Highlighting and Folding
- PCRE (Perl Compatible Regular Expression) Search/Replace
- GUI entirely customizable: minimalist, tab with close button, multi-line tab, vertical tab and vertical document list
- Document Map
- Auto-completion: Word completion, Function completion and Function parameters hint
- Multi-Document (Tab interface)
- Multi-View
- WYSIWYG (Printing)
- Zoom in and zoom out
- Multi-Language environment supported
- Bookmark
- Macro recording and playback
- Launch with different arguments

**Python Solitaire Fan Club Edition (PySolFC)** – v2.0. <https://sourceforge.net/projects/pysolfc/>. Free GNU General Public License Python script and executables for Microsoft® Windows®, Apple® OS X® and GNU/Linux® by Skomoroh and Brian Lenihan. PySolFC is a collection of more than 1,000 solitaire card games. There are games that use the 52 card International Pattern deck, games for the 78 card Tarock deck, eight and ten suit Ganjifa games, Hanafuda games, Matrix games, Mahjongg games, and games for an original hexadecimal-based deck.

(Continued on page 10)

The screenshot shows the Notepad++ editor interface. The title bar reads "D:\source\notepad++\trunk\PowerEditor\src\EncodingMapper.cpp - Notepad++". The menu bar includes File, Edit, Search, View, Encoding, Language, Settings, Macro, Run, Plugins, and Window. The toolbar contains various icons for file operations and editing. The main editor area shows a C++ source file with line numbers 66 through 95. The code includes a list of encoding mappings and a function named `isInListA`. The status bar at the bottom indicates "C++ source file length: 8257 lines: 145 Ln: 74 Col: 1 Sel: 0" and the encoding is "ANSI". A "Document Map" pane is visible on the right side of the editor.

```

66     {932, "Shift_JIS MS_Kanji csShiftJIS csWindows31J"},
67     {949, "windows-949 korean"},
68     {51949, "euc-kr csEUCKR"},
69     {874, "tis-620"},
70     {10007, "x-mac-cyrillic xmacryillic"},
71     {21866, "koi8_u"},
72     {20866, "koi8_r csKOI8R"}
73 };
74
75 EncodingMapper * EncodingMapper::_pSelf = new EncodingMapper;
76
77 bool isInListA(const char *token, const char *list) {
78     if (!token || !list)
79         return false;
80     char word[64];
81     int i = 0;
82     int j = 0;
83     for (; i <= int(strlen(list)) ; i++)
84     {
85         if ((list[i] == ' ') || (list[i] == '\0'))
86         {
87             if (j != 0)
88             {
89                 word[j] = '\0';
90                 j = 0;
91
92                 if (!strcmp(token, word))
93                     return true;
94             }
95         }
96     }
97 }

```

Above: Notepad++ editor showing line numbering, document tabs and Document Map

*(Continued from page 9)*

Features include:

- modern look and feel (uses Ttk widget set)
- multiple card sets and tableau backgrounds
- sound
- unlimited undo
- player statistics
- a hint system
- demo games
- a solitaire wizard
- support for user written plug-ins
- an integrated HTML help browser
- lots of documentation.

**VideoLAN Client (VLC) – v2.2.4.**

<https://www.videolan.org/vlc/>. Free GNU Lesser General Public License source code and executables for Microsoft® Windows®, Apple® macOS™ and iOS, Google Android™, FreeBSD and GNU/Linux® by The VideoLAN Organization. VLC is a cross-platform multimedia player and framework, which plays most multimedia files, DVDs, Audio CDs, VCDs, and various streaming protocols. VLC media player is simple, fast, and powerful. It plays everything, files, discs, webcams, devices, and streams. VLC plays most codecs (MPEG-2, DivX, H.264, MKV, WebM, WMV, MP3, etc.) so no codec packs are needed. And VLC

*(Continued on page 11)*

*(Continued from page 10)*

is hassle free with no spyware, no ads, and no user tracking.

## Press Release

### Digital Privacy at the U.S Border: A New How-To Guide from EFF

#### Protect Yourself While Traveling To and From the U.S.

<https://www.eff.org/wp/digital-privacy-us-border-2017>

San Francisco, March 9, 2017 - Increasingly frequent and invasive searches at the U.S. border have raised questions for those of us who want to protect the private data on our computers, phones, and other digital devices. A new guide released today by the Electronic Frontier Foundation (EFF) gives travelers the facts they need in order to prepare for border crossings while protecting their digital information.

“Digital Privacy at the U.S. Border” helps everyone do a risk assessment, evaluating personal factors like immigration status, travel history, and the sensitivity of the data you are carrying. Depending on which devices come with you on your trip, your gadgets can include information like your client files for work, your political leanings and those of your friends, and even your tax return. Assessing your risk factors helps you choose a path to proactively protect yourself, which might mean leaving some devices at home, moving some information off of your devices and into the cloud, and using encryption. EFF’s guide also explains why some protections, like fingerprint locking of a phone, are less secure than other methods.

“Border agents have more power than police officers normally do, and people crossing the border have less privacy than they usually expect,” said EFF Staff Attorney Sophia Cope.



“Border agents may demand that you unlock your phone, provide your laptop password, or disclose your social media handles. Yet this is where many of us store our most sensitive personal information. We hope this guide makes preparing for your trip and protecting your devices easier and more effective.”

Many travelers are confused about what is legal at the border, and the consequences for running afoul of a border agent can run the gamut from indefinite seizure of your phone and computer, to denial of entry for foreign visitors, although American citizens always have the right to re-enter the country. EFF’s new guide hopes to clear up misinformation while recognizing that there is no “one size fits all” approach to crossing into the United States. In addition to the full report, EFF has also created a pocket guide for helping people concerned with data protection.

“The border is not a Constitution-free zone, but sometimes the rules are less protective of travelers and some border agents can be aggressive,” said EFF Senior Staff Attorney Adam Schwartz. “That can put unprepared travelers in a no-win dilemma at the U.S. border. We need clearer legal protections for everyone, but in the meantime, our report and pocket guides aim to put more power back into the hands of travelers.”

For EFF’s pocket guide:

<https://www.eff.org/document/eff-border-search-pocket-guide>

For EFF’s summary of your constitutional rights:

<https://www.eff.org/document/digital-privacy-us-border>

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## Google Search Tricks

by Melanie Birnbaum

Teckspert Talk, Century Village Computer Club, Florida  
<http://www.cvcomputerclub.com/>

You use Google Search every day, but still all you know is how to search. However, the search engine has plenty of tricks up its sleeve.

Here's an overview of some of the more useful Google search tricks:

- Use quotes to search for an exact phrase. Searching a phrase in quotes will yield only pages with the same words in the same order as what's in the quotes. It's especially useful if you're trying to find results containing a specific phrase.
- Use an asterisk within quotes to specify unknown or variable words. Here's a lesser known

trick:

searching a phrase in quotes with an asterisk replacing a word will search all

variations of that phrase. It's helpful if you're trying to determine a song from its lyrics, but you couldn't make out the entire phrase (e.g. "imagine all the \* living for today"), or if you're trying to find all forms of an expression (e.g. "\* is thicker than water").

- Use the minus sign to eliminate results containing certain words. You'll want to eliminate results with certain words if you're trying to search for a term that's generating a lot of results that aren't of interest to you. Figure out what terms you're not interested in (e.g. jaguar -car) and re-run the search.
- Search websites for keywords. Think of the "site:" function as a Google search that searches only a particular website. If you want to see every time TIME.com mentioned Google, use the search "Google site:TIME.com".
- Search news archives going back to the mid-

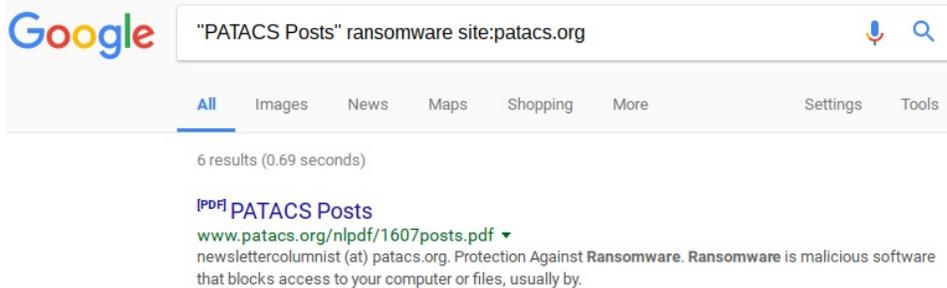
1880s. Google News has an option to search over 100 years' worth of archived news from newspapers around the world. The address is <https://news.google.com/newspapers?hl=en>

- Compare foods using "vs". Can't decide between a burger or pizza for dinner? Type in "rice vs. quinoa," for example, and you'll receive side-by-side comparisons of the nutritional facts.
- Filter search results for recipes. If you search your favorite food, and then click "Search Tools" right under the search bar, you'll be able to filter recipes based on ingredients, cook time and calories. It's the perfect tool if you have certain dietary restrictions.
- Use "DEFINE:" to learn the meaning of words—slang included. Streamline the

dictionary process by using, for example, "DEFINE: mortgage." For words that appear in the

dictionary, you'll be able to see etymology and a graph of its use over time alongside the definition. Google will even sift the web to define slang words or acronyms. Try out "DEFINE: bae" or "DEFINE: SMH".

- Play Atari Breakout by searching it on Google Images. The legendary brick breaker game is available for easy access on Google. Just search "Atari Breakout" (without quotes) on Google Images and enjoy.
- Search images using images. Ever come across a photo that looks strangely familiar? Or if you want to know where it came from? If you save the image, and then search it on Google Images (with the camera button), you'll be able to see similar images on the web.
- Press the mic icon on Google's search bar, and say "flip a coin" Google will flip a coin for you when you don't have one on hand.



## 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!

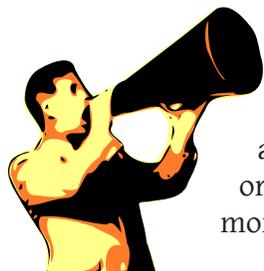
## PATACS Email Discussion List



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

PATACS is a member of the Association of Personal Computer User Groups (APCUG), a worldwide organization that helps technology user groups by facilitating communications between member groups and industry vendors.

## Virtual Technology Conference: May 6

The Spring online conference will be on May 6. More information and free registration is at <https://apcug-spring-2017-vtc.eventbrite.com>.

### Track 1

- 1 pm: Picking the Best Backup Approach presented by Gene Barlow, UGR Relations
- 2 pm: Home Automation presented by Bill James, Computer Club of Oklahoma City
- 3 pm: Tune Up Your Windows PC presented by Jere Minich, Lake Sumter Computer Society

### Track 2

- 1 pm: Photo Editing with the GIMP presented by Dennis Rex, SoCal Linux Expo
- 2 pm: Crypto Viruses presented by Toby Scott, Channel Islands PCUG
- 3 pm: Alternative to Closing Your Computer Club presented by Ray Baxter, Payson Area Computer Society

## Archived Presentations

Videos from previous presentations are available on APCUG's YouTube Channel, <https://www.youtube.com/user/APCUGVideos>.

Presentation PDFs and handouts can be found at: <https://apcug2.org/category/virtual-tech-conference/>.

## 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.

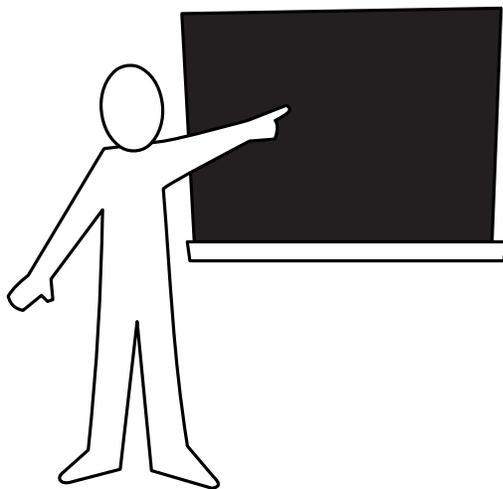
SeniorTech is a service of the Jewish Council for the Aging (JCA). Within the limits of its resources, JCA serves people of all faiths and from all walks of life.

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



## 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.

## May-June 2017 Schedule

May 06 & 07: Backup & Restore

May 13 & 14: Build Your Own

May 20 & 21: Windows® 10 Basics

May 27 & 28: Word & Excel 2016 – What’s New

Jun 03 & 04: Virus & Malware Troubleshooting



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# PATACS Posts

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## May 2017 PATACS Event Calendar

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Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3 7-9pm General Meeting, Arlington	4 Star Wars Day 	5	6
7	8	9 Lost Sock Memorial Day 	10 7-9pm Online Zoom Meeting	11	12	13
14 Mother's Day 	15 7-9pm Board Meeting, Arlington	16	17	18	19	20 12:30-3:30pm General Meeting, Fairfax
21	22	23	24 7-9pm Technology Help Desk, Arlington	25 Geek Pride Day 	26	27 July Newsletter Articles Due
28	29 Memorial Day  THANK YOU !	30	31			

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