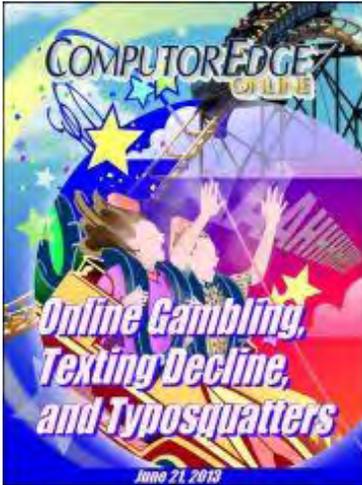


# ComputerEdge™ Online — 06/21/13

This issue:

## Online Gambling, Texting Decline, and Typosquatters



Online and Mobile Gambling; Gadget News: Energy Consumption to First Quarter Profits; Comic Book Sales Growing For Print and Digital; Text Messagers Switching from Phone Companies to Internet Apps; Declining E-mail Accounts, and Microsoft Versus Google; Bad Boys of High Tech: Typosquatters; Misbehaving Boys of High Tech: Patent Trolls; Relationships and Marriages through the Internet; High Tech as Villain?; YouTube News; App News

### Table of Contents:

#### [Digital Dave](#) by *Digital Dave*

Digital Dave answers your tech questions.

Wiping Drives for Computer Disposal; Is There an Alternative to Word 2001?; Jumpy Windows Processes.

#### [Online Gambling, Texting Decline, and Typosquatters](#) by Marilyn K. Martin

Digital Versus Print Comics, Online Gambling, and High Tech as Villain, and More!

Online and Mobile Gambling; Gadget News: Energy Consumption to First Quarter Profits; Comic Book Sales Growing For Print and Digital; Text Messagers Switching from Phone Companies to Internet Apps; Declining E-mail Accounts, and Microsoft Versus Google; Bad Boys of High Tech: Typosquatters; Misbehaving Boys of High Tech: Patent Trolls; Relationships and Marriages through the Internet; High Tech as Villain?; YouTube News; App News.

#### [Adding Menu Items to the System Tray the Easy Way](#) by Jack Dunning

Menu Items for QuikPlay Script Controls

Jack is reminded that some people don't have the Windows key. Here is how to quickly add right-click menu items to the System Tray icon.

#### [Wally Wang's Apple Farm](#) by Wally Wang

A Supercomputer on Your Desk

A Supercomputer on Your Desk; The New Laptop Standard; The Problem with Microsoft (From the Inside); The Importance of Native Controls; The Government is Watching You; The Future of Blackberry and Windows Phone 7; See All Drives in Your Computer.

#### [Worldwide News & Product Reviews](#) by Charles Carr

The latest in tech news and hot product reviews.

Build a Better-Than-Xbox-One or -PS4 PC for (Pretty) Cheap; Researcher: Personal Communication Needed More Than Ever; Shareholder Meeting Question: Why Does Amazon Ban Guns, but Not Extremely Violent Videos and Games?; Portable EEG Device for Consumers; Samsung Galaxy S 4 Cell Phone (AT&T).

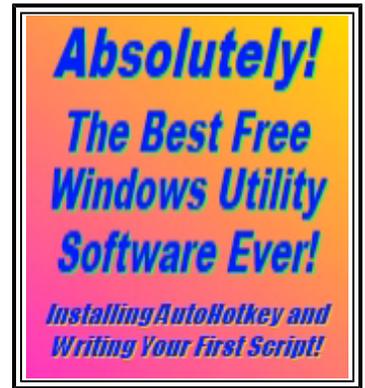
(Click Banner)

(Click Banner)

### DEPARTMENTS:

[Editor's Letters: Tips and Thoughts from Readers](#) by ComputerEdge Staff

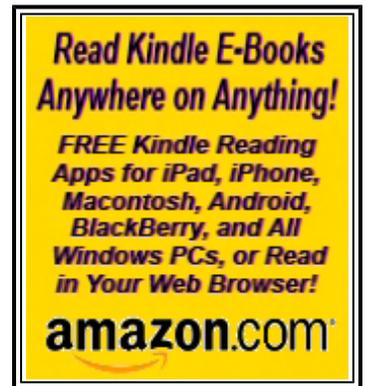
Computer and Internet tips, plus comments on the articles and columns.  
"Protecting Against Power Surges," "Old Install Disks, XP Professional"



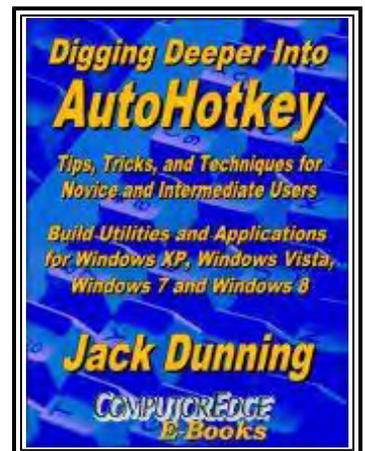
(Click Banner)



(Click Banner)



(Click Banner)



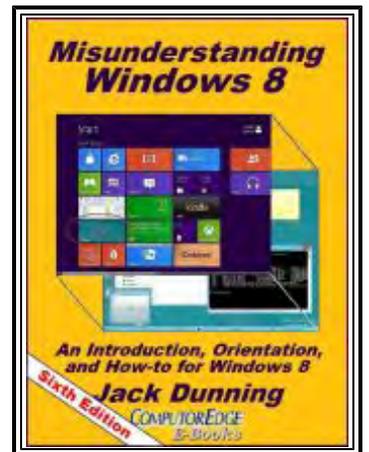
(Click Banner)



(Click Banner)



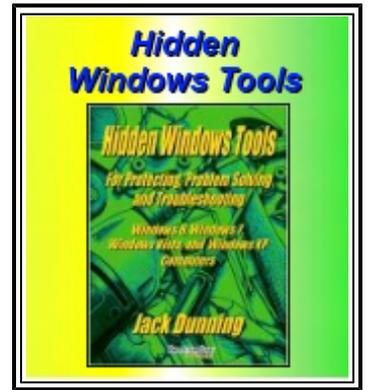
(Click Banner)



(Click Banner)



(Click Banner)



(Click Banner)

Send mail to [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com) with questions about editorial content.

Send mail to [cwebmaster@computoredge.com](mailto:cwebmaster@computoredge.com) with questions or comments about this Web site.

Copyright © 1997-2013 The Byte Buyer, Inc.

ComputerEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 573-0315

---

---

[Return to Table of Contents](#)



## Digital Dave

“Digital Dave answers your tech questions.” by *Digital Dave*

Wiping Drives for Computer Disposal; Is There an Alternative to Word 2001?; Jumpy Windows Processes.

*Dear Digital Dave,*

*I need to dispose of an older computer. I don't want to leave any essential data on it. I used to have a diskette named "Kill Disk" which would wipe the disk clean, but have lost it. Do you have any suggestions as to where I can download that program or alternatives?*

*Thanks, as always, for your advice.*

*Dana Moran  
Saratoga, CA*

Dear Dana,

Many people don't realize that when they first delete a file in Windows the filename and location in the file table is only marked for deletion. Even after emptying the Recycle Bin, the file is actually still sitting on the drive and you can find it with special software—at least until the file's space on the drive is overwritten. That's why it's recommended that a drive be wiped of any sensitive files before discarding it. While it would be rare for anyone to actually take the time to scan a random drive found laying around for undeleted files (it's a tedious process that rarely pays off), it's a good idea to make sure that the files are all removed. This is done by replacing the space where the files are located on the drive with nothing but one character—usually zero. On high security drives with extremely sensitive information, they may be scrubbed several times to make sure that no traces of the original files can be recovered. That's overkill for most people.

One of the better free utilities which permanently removes files from your disk drive is CCleaner ([www.piriform.com/ccleaner/download/standard](http://www.piriform.com/ccleaner/download/standard)). It not only includes Drive Wiper (see Figure 1), but it has tools for cleaning up unnecessary temporary files and the Windows Registry while you are still using the computer. It is one of the few free utilities that I use on a regular basis—especially on Vista machines which seem to clog up and slow down quickly.

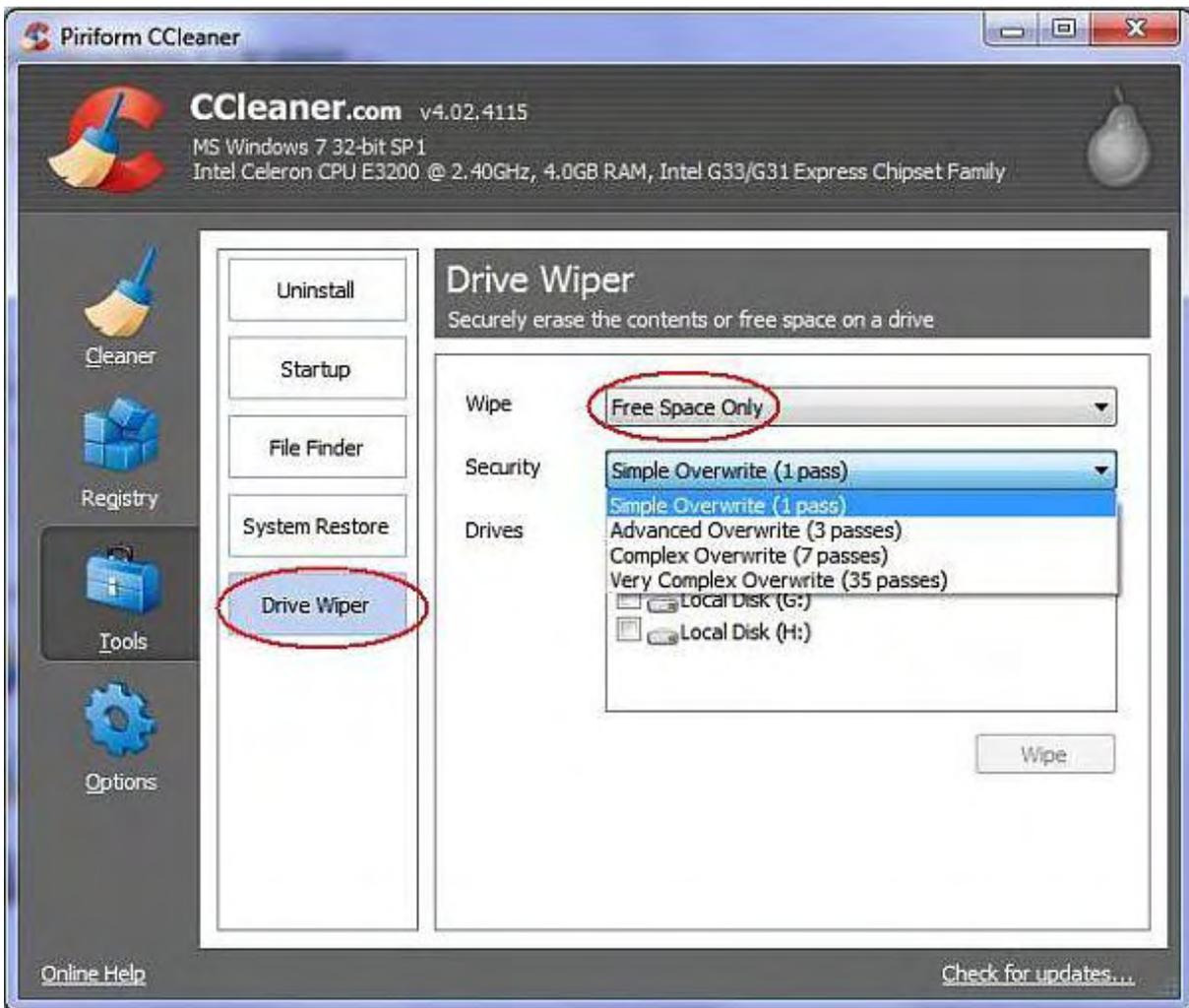


Figure 1. CCleaner has a feature called Drive Wipe which will permanently delete files on a hard drive. The number of passes is selectable.

In your case you would wipe the entire drive. For people who will still be using the drive, but only want to remove the residue of deleted files (guaranteeing that they won't be recovered), the Free Space Only mode would do the job.

I'm sure that other readers have their own favorite free drive scrubbers, if they would like to share.

Digital Dave

*Dear Digital Dave,*

*Having tired of misbehavior of my ancient Word 2000 sr-1, I'm seeking a non-Microsoft word processing CD as a replacement. I'm staying with Windows XP, at least until buying a new PC. Old girl runs quite well, thank you. The Microsoft sales person advises me that newest Word CD will not accept XP. I'm not ready to buy Windows 7 or 8! Your thoughts will, as always, be greatly appreciated!*

*Francis McGuire  
San Diego, CA*

Dear Francis,

While I once used Microsoft Office in the old days, it's been years since I've had any of those products (including Microsoft Word) on my computers. The primary reason people stick with Microsoft is because the organizations they work for or service demand it. There are occasionally some problems with transferring the formatting to and from non-Microsoft products. But if you have no such dependencies, then I recommend that you go with the free Open Source software packages LibreOffice ([www.libreoffice.org/default](http://www.libreoffice.org/default)) or Apache OpenOffice ([www.openoffice.org](http://www.openoffice.org)). (The two programs come from the same roots and are almost identical in operation.) They both include word processing, spreadsheet, and presentation software, plus more.

You don't need a CD because you can download either (or both) free directly from the Web site. If you need more information about how the programs work, Rob Spahitz wrote a tutorial for *ComputerEdge* which is now included in his e-book *Getting Started with OpenOffice (LibreOffice): The Free Replacement for Microsoft Office* ([www.amazon.com/gp/product/B008KMAN16/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B008KMAN16&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B008KMAN16/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B008KMAN16&linkCode=as2&tag=comput0b9-20)). In his book Rob compares the free software with Microsoft Office.

Digital Dave

Dear Dave,

*I often feel my laptop is running slower than it should and boot up Task Manager to see what's what. Recently I've noticed that when I look under the Processes tab, the list is jumping. That is, the items on the list are moving up and down and actually changing places on the list! Trying to select something is like playing Whack a Mole. I don't recall ever seeing this before and am wondering if something fishy is going on. Is this "jumping" normal, or did I inadvertently change something that may have brought it on?*

Thanks much for all your help over the years.

Joe Piluso  
San Diego, CA

Dear Joe,

Yes, it's normal and, yes, you most likely inadvertently changed something.

When you open Task Manager (CTRL+SHIFT+ESC) you'll find a number of categories under the Processes tab (see Figure 2). Like most tables in Windows, clicking on the category heading will sort the table by that category. Click on it again and it will reverse the order in the same category.

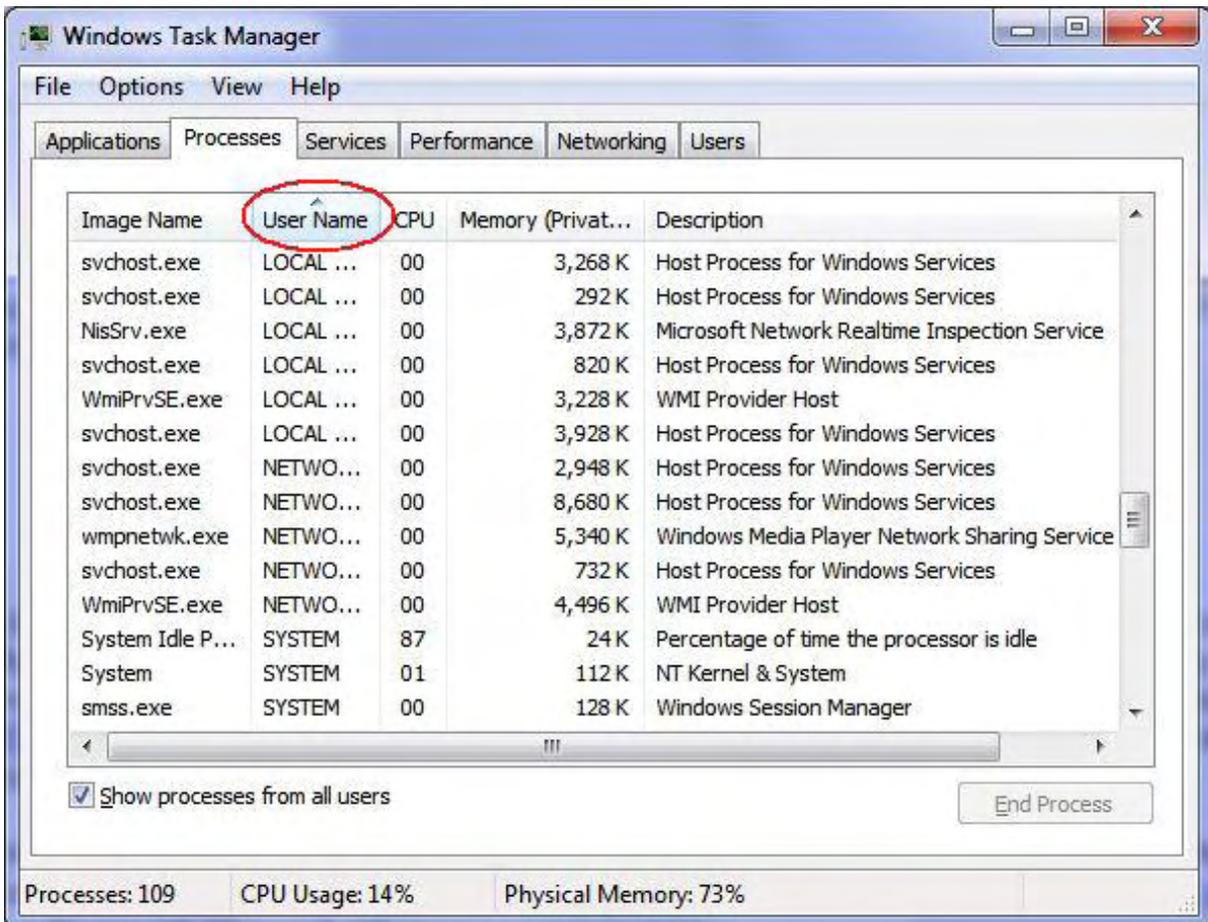


Figure 2. Clicking on the category heading User Name sorts the entire table by that category.

If you want to see what's using up the most processor time, click on CPU (Central Processing Unit). The processes using the most processor time (by percentage) will appear at the top of the table. However, since the percentage is constantly changing, the order of the processes keeps jumping around. You must have clicked on the CPU heading at one time.

Once you've identified the process you want to investigate by CPU usage, click on the Image Name heading to stabilize the list in alphabetical order. Scroll down the list and select the process by name.

Digital Dave

---



---



---

[Return to Table of Contents](#)



## Online Gambling, Texting Decline, and Typosquatters

“Digital Versus Print Comics, Online Gambling, and High Tech as Villain, and More!” by Marilyn K. Martin

Online and Mobile Gambling; Gadget News: Energy Consumption to First Quarter Profits; Comic Book Sales Growing For Print and Digital; Text Messagers Switching from Phone Companies to Internet Apps; Declining E-mail Accounts, and Microsoft Versus Google; Bad Boys of High Tech: Typosquatters; Misbehaving Boys of High Tech: Patent Trolls; Relationships and Marriages through the Internet; High Tech as Villain?; YouTube News; App News.

### Online and Mobile Gambling

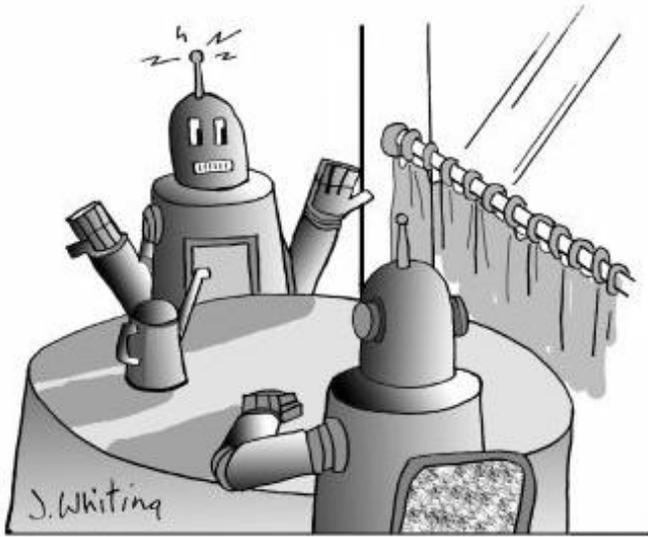
ABC News ran a story in February 2013 about a new Nevada law that legalizes online interstate gambling ([abcnews.go.com/blogs/business/2013/02/whats-next-after-nevada-legalizes-online-interstate-gaming/](http://abcnews.go.com/blogs/business/2013/02/whats-next-after-nevada-legalizes-online-interstate-gaming/)). Bill AB114 authorizes Nevada to enter into agreements with other states to offer Internet poker. (Background: US online gambling was nearly halted after the Unlawful Internet Gambling Enforcement Act of 2006 was implemented. But the Department of Justice in 2011 issued a letter stating that the federal Wire Act of 1961 only applies to sports betting.)

A site called NewJerseyOnlineGambling.net ([www.newjerseyonlinegambling.net/news/nj-passes-online-gambling-legislation.html](http://www.newjerseyonlinegambling.net/news/nj-passes-online-gambling-legislation.html)) states that New Jersey also passed an online gambling law not long after Nevada and Delaware. New Jersey Gov. Chris Christie had vetoed one online gambling bill after another. But he finally signed one into law since he feels online gambling is needed to get Atlantic City back to its former glory as the leading casino provider on the East Coast.

According to the *San Jose Mercury News* (through the *Denver Post*) in March 2013, tech companies are rushing to cash in ([www.denverpost.com/business/ci\\_22800843/tech-firms-poised-move-states-ok-online-gambling](http://www.denverpost.com/business/ci_22800843/tech-firms-poised-move-states-ok-online-gambling)) on mobile and online gambling after those three states passed laws allowing online gambling. Game developer Zynga ([company.zynga.com/](http://company.zynga.com/)) is already moving to offer online gambling in the United Kingdom and Nevada. Anti-gambling activists claim that online gambling will use practices perfected in online advertising and marketing, to target vulnerable consumers and lead to a spike in "problem gamblers."

### Gadget News: Energy Consumption to First Quarter Profits

According to *PC World* (through the *Denver Post*), our technological gadgets consume way too much energy ([www.denverpost.com/techreviews/?articleId=51263857](http://www.denverpost.com/techreviews/?articleId=51263857)). From communications technologies to consumer electronic devices, their energy consumption could be cut by 50% by just using current energy-efficient technologies. The International Energy Agency



I don't know about you, but I find it comforting to have the same conversation word for word down to the last detail everyday. I never get bored with it."

([www.iea.org](http://www.iea.org)) recently released a report, "Gadgets and Gigawatts," that advises countries to implement more energy-efficient policies for tech equipment. Mobile device manufacturers are already in the loop, with longer lasting batteries as a selling point.

The Associated Press (through the *Denver Post*) in May 2013 offered a story on how gadgets, chips and service companies are faring financially ([www.denverpost.com/technology/ci\\_23166756/how-gadgets-chips-services-companies-are-faring](http://www.denverpost.com/technology/ci_23166756/how-gadgets-chips-services-companies-are-faring)). First quarter earnings reports found that Apple-rival Samsung Electronics was up 53% from a year ago. Chip-maker Intel Corp., despite the decline in sales of desktop and laptop computers, is holding steady by rising shipments of chips for servers. Microsoft earnings were flat, when adjusted for deferred revenue, and IBM net income fell 1%.

### Comic Book Sales Growing For Print And Digital

A March 2013 article in Spectrum ([iee.org](http://iee.org)), reports that digital comics now let fans purchase digital copies of new weekly comic book issues ([spectrum.ieee.org/geek-life/tools-toys/comic-books-go-digital](http://spectrum.ieee.org/geek-life/tools-toys/comic-books-go-digital)). While this may replace the every Wednesday trek to the comic book store for some fans, others complain that digital comics are just made-for-print replicas that are not so great in screen-viewable mode. But some smaller publishers are leading the way, creating digital comics that are arranged and sized differently from the print format. Madefire ([www.madefire.com](http://www.madefire.com)) offers both digital authoring tools for Motion Books, as well as an app for consumers. Marvel ([marvel.com/mobile](http://marvel.com/mobile)) now offers downloadable apps, including their free Augmented Reality App "to unlock exclusive content, with video recaps, character bios and creator commentaries."

Associated Press reported (through the *Denver Post*) in May 2013 that the annual Free Comic Book Day ([www.denverpost.com/technology/ci\\_23163144/free-comic-book-day-finds-print-digital-demand](http://www.denverpost.com/technology/ci_23163144/free-comic-book-day-finds-print-digital-demand)) is a great way for the industry to find new readers, and introduce regulars to new comic book storylines. Comic book stores have become social hubs, while comic book publishers big and small have been posting steady gains in both sales and number of particular issues. According to Comichron ([www.comichron.com](http://www.comichron.com)), sales of single-issue comic books were up nearly \$60 Million in 2012, as compared to 2011.

### Text Messagers Switching from Phone Companies to Internet Apps

The Associated Press (through the *Denver Post*) reported in early May 2013 that text messagers are rapidly switching to Internet-based applications ([www.denverpost.com/technology/ci\\_23157294/sore-thumbs-us-text-messaging-declines](http://www.denverpost.com/technology/ci_23157294/sore-thumbs-us-text-messaging-declines)). These Internet apps, like Apple's Messages ([www.apple.com/ios/messages/](http://www.apple.com/ios/messages/)), are starting to take over what was once a cash cow for phone companies. American phone companies have responded by giving text messaging away for free as part of new plans. While in other countries with a high cost for text messaging, chat applications like WhatsApp ([www.whatsapp.com](http://www.whatsapp.com)) have exploded.

About.com lists the Best Texting App Finalists ([ipod.about.com/library/RCA-2013/bl-RCA-2013-Finalists-Texting.htm](http://ipod.about.com/library/RCA-2013/bl-RCA-2013-Finalists-Texting.htm)) for their 2013 Readers' Choice Awards. The Top Three are also free Kik Messenger, Minus and Tango. Another site called AppsGoneFree ([appadvice.com/appguides/show/apps-for-texting](http://appadvice.com/appguides/show/apps-for-texting)) features the best American apps for free texting from the Apple Store. "Essential" texting apps are Textfree and TextNow Free, while "Notable" texting apps range from YakMessenger to Message to Textie Messaging.

### Declining E-mail Accounts, and Microsoft Versus Google

*The Boston Globe* reported in March 2013 that consumer e-mail traffic fell ([www.boston.com/business/innovation/2013/03/29/mail-gets-cold-shoulder/Fyj9cD2PmWFFUAKuNiAdbN/story.html](http://www.boston.com/business/innovation/2013/03/29/mail-gets-cold-shoulder/Fyj9cD2PmWFFUAKuNiAdbN/story.html)) 9.5% between 2010 and 2012, and is projected to keep declining. Some people are trying to get on top of their mountain of e-mails by refusing to give out their e-mail addresses, even on business cards. Many of these anti e-mail folks prefer phone calls to sorting through a torrent of superfluous messages and junk mail, while the younger set has gravitated to Twitter or texting.

In February 2013, ABC News reported that Microsoft is automatically converting ([abcnews.go.com/Technology/microsoft-outlook-replace-hotmail-microsoft-throws-30-million/story?id=18538013#.UbDmiNhiP4Y](http://abcnews.go.com/Technology/microsoft-outlook-replace-hotmail-microsoft-throws-30-million/story?id=18538013#.UbDmiNhiP4Y)) all their Hotmail and other e-

mail services to their new Outlook.com. Outlook was designed to be similar to Microsoft's Windows 8 operating system, with new social features. It also boasts a new sorting option called Sweep, which moves newsletters, promo messages and other recurring e-mails into their own folders or the Trash. As part of the roll-out, Microsoft has been attacking Google's Gmail which reportedly shows ads based on the words in private e-mails.

The Associated Press (through the *Boston Globe*) ran a story in June 2013 that Microsoft is going to add Outlook ([www.boston.com/business/technology/2013/06/05/microsoft-add-outlook-windows-tablets/iB3qIYeEUCsTounH7GhjDM/story.html](http://www.boston.com/business/technology/2013/06/05/microsoft-add-outlook-windows-tablets/iB3qIYeEUCsTounH7GhjDM/story.html)) to more tablet computers running a lightweight version of its Windows 8 operating system. A retooled Windows 8.1, based on complaints of Windows 8, will be released in June 2013 at the annual Apple Programmers' conference ([www.apple.com/pr/library/2013/04/24Apple-Worldwide-Developers-Conference-to-Kick-Off-June-10-in-San-Francisco.html](http://www.apple.com/pr/library/2013/04/24Apple-Worldwide-Developers-Conference-to-Kick-Off-June-10-in-San-Francisco.html)) in San Francisco, as well as probably be discussed at Microsoft's Net. Developers Conference ([vslive.com/Events/Redmond-2013/Home.aspx?](http://vslive.com/Events/Redmond-2013/Home.aspx?utm_source=AttendeeMktg&utm_medium=SEM&utm_campaign=VSLRAW&gclid=CMrcu4P51LcCFVNo7Aod2k0AgA)

[utm\\_source=AttendeeMktg&utm\\_medium=SEM&utm\\_campaign=VSLRAW&gclid=CMrcu4P51LcCFVNo7Aod2k0AgA](http://vslive.com/Events/Redmond-2013/Home.aspx?utm_source=AttendeeMktg&utm_medium=SEM&utm_campaign=VSLRAW&gclid=CMrcu4P51LcCFVNo7Aod2k0AgA)) in August. Existing Window RT users will get Outlook for free as part of this year's Windows upgrade to 8.1.

According to NetworkWorld in May 2013, the city of Boston has made a drastic decision to save money by dumping Microsoft Exchange ([www.networkworld.com/community/blog/boston-dumps-microsoft-exchange-google-apps](http://www.networkworld.com/community/blog/boston-dumps-microsoft-exchange-google-apps)) in favor of Google Apps. It will cost the city \$800,000 to switch to Gmail, Google Docs and Google Cloud for storage. But the city estimates they will save at least \$280,000 a year by moving to Google. Other companies, like Enterasys Networks ([www.enterasys.com/](http://www.enterasys.com/)) are also switching to Google, saying Microsoft tools have not upgraded smoothly, with messy calendaring and more difficult mobile syncing.

## Bad Boys of High Tech: Typosquatters

In 2006, Microsoft sued "cybersquatters" ([mcpmag.com/articles/2006/08/23/microsoft-sues-cybersquatters.aspx](http://mcpmag.com/articles/2006/08/23/microsoft-sues-cybersquatters.aspx)) for infringement, with bogus but similar sites like freems@hotmail.com. The explosion of online advertising had given rise to illegal registration of Web domains, since billing for ads was determined by number of clicks. So these illegal sites could drive up traffic and revenue, by using MS wording or brand name misspellings.

In May 2013, the *Denver Post* reported that Facebook has won their court battle ([www.denverpost.com/business/ci\\_23152140/facebook-wins-court-battle-against-typosquatters](http://www.denverpost.com/business/ci_23152140/facebook-wins-court-battle-against-typosquatters)) against multiple "typosquatters." These are companies or individuals who purchase nearly-identical domain names (like gacebook.com or dacebook.com) in hopes users will accidentally visit their sites, and then redirect users to more malicious sites.

## Misbehaving Boys of High Tech: Patent Trolls

In June 2013, the *Los Angeles Times* ran a story that President Obama was going to push Congress to crack down on companies known as patent trolls ([www.latimes.com/business/la-fi-obama-patent-trolls-20130605,0,7869034.story](http://www.latimes.com/business/la-fi-obama-patent-trolls-20130605,0,7869034.story)). These are companies that buy up patents, then use the threat of lawsuits to obtain licensing fees. This, in turn, could possibly put a damper on innovation in the high tech business. Five Presidential executive orders were signed that called for new rules ([www.whitehouse.gov/blog/2013/06/04/taking-patent-trolls-protect-american-innovation](http://www.whitehouse.gov/blog/2013/06/04/taking-patent-trolls-protect-american-innovation)) requiring the disclosure of true owners of patents, and better government examinations of patent applications. The high tech industry has complained for years about patent-holding firms, which don't manufacture products but employ questionable tactics to obtain fees for their use through licensing agreements.

Also in June 2013, the *New York Times* ran an editorial on the vast amount of frivolous patent lawsuits ([www.nytimes.com/2013/06/05/opinion/make-patent-trolls-pay-in-court.html](http://www.nytimes.com/2013/06/05/opinion/make-patent-trolls-pay-in-court.html)) brought by patent trolls—who buy up tons of patents just to sue anyone and everyone who might be using or selling the claimed inventions. The editorial claims that this "has slowed the development of new products, increased costs for businesses and consumers, and clogged our judicial system." Only Vermont, out of 50 states, has passed laws empowering its attorney general to sue patent holders who claim infringement against a Vermont business or resident in "bad faith."

Yahoo Finance ran an article in June 2013 that one of the worst patent trolls ([au.finance.yahoo.com/news/patent-trolls-come-federal-sights-015119936.html](http://au.finance.yahoo.com/news/patent-trolls-come-federal-sights-015119936.html)) is a company founded in 2000 by a former Microsoft Tech Officer, Nathan Myhrvold. Based in Bellevue, Washington, Intellectual Ventures has acquired 70,000 patents and claims it has generated \$3 Billion in cumulative licensing revenue, and paid \$400 Million out to individual inventors. Another patent troll, a New York based CopyTele, has sued Microsoft for supposedly infringing on its patents, and claims that the "large companies" have done a great job vilifying smaller companies that go after them with patent lawsuits.

## Relationships and Marriages through the Internet

*USA Today* reported in early 2013 that one-third of new marriages have started online ([www.usatoday.com/story/news/nation/2013/06/03/online-dating-marriage/2377961/](http://www.usatoday.com/story/news/nation/2013/06/03/online-dating-marriage/2377961/)). Research states that these online marriages are slightly happier and less likely to split up than relationships that started offline. About 45% of the online newlyweds met on dating sites, while the rest met through social media, chat rooms, instant messaging or other online forums. The study has its critics, since it was commissioned and paid for by eHarmony, an online dating site.

*The Atlantic* ran a story in February 2013 about how even prisoners are finding romance ([www.theatlantic.com/national/archive/2013/02/young-married-and-incarcerated-prisoners-find-romance-behind-bars/273163/](http://www.theatlantic.com/national/archive/2013/02/young-married-and-incarcerated-prisoners-find-romance-behind-bars/273163/)) and even marrying while still incarcerated. Prisoners sometimes reach out to women they knew before prison, while others meet online through sites like PrisonTalk ([www.prisontalk.com/](http://www.prisontalk.com/)). And once forbidden, even Lifers in New York prisons are now allowed to marry. For married prisoners that get out, statistics show that the marriage stabilizes them and results in a 12% decrease in committing new crimes, compared to still-single prisoners who are released.

## High Tech as Villain?

Does the high tech industry have a hidden side of greed and double-dealing? The recent outrage over the government's massive tracking of private citizens through Internet servers seems to point in that direction. And even mighty Apple is on trial in New York for alleged e-book price fixing, while deceased Apple founder Steve Jobs was guilty of secretive anti-poaching agreements among certain high tech companies. But are there other examples that slip past the glare of public scrutiny?

Brier Dudley of the *Seattle Times* reported in January 2013 that local mega-tech companies (from Microsoft to Amazon) expected "breaks" ([seattletimes.com/html/business/technology/2020223102\\_briercolumn28xml.html](http://seattletimes.com/html/business/technology/2020223102_briercolumn28xml.html)) from Washington State's tax proposals. Such as being exempt from proposed tax increases for education. This strikes many in Washington as curious, since these same high tech companies keep calling for the state to improve the educational system to better train their future work force. They just don't want to help pay for it.

Vehicle GPS "mistakes" are legendary, from circuitous routes through parking lots, to "your house" being listed as next door. But in January 2013, *Newser* ran a story about a man whose GPS took him to the wrong house, and he was shot and killed ([www.newser.com/story/161834/man-murdered-after-gps-takes-him-to-wrong-house.html](http://www.newser.com/story/161834/man-murdered-after-gps-takes-him-to-wrong-house.html)) when mistaken for a home invader.

Associated Press (through Chicago's WPTV news channel) reported in April 2013 that the FDA is looking into an increase in reported problems—and even deaths—during high tech robotic surgeries ([www.wptv.com/dpp/news/health/high-tech-surgery-tool-under-scrutiny-after-several-deaths](http://www.wptv.com/dpp/news/health/high-tech-surgery-tool-under-scrutiny-after-several-deaths)). Most surgeons praise the robotic systems, claiming it is safer with smaller incisions, which leads to shorter hospital stays. The FDA is trying to determine if the safety issues are directly related to the robot.

## YouTube News

Associated Press (through the *Denver Post*) ran a story in May 2013 where Google Executive Chairman Eric Schmidt charges that YouTube has already displaced television watching ([www.denverpost.com/technology/ci\\_23164841/youtube-has-already-defeated-tv-googles-eric-schmidt](http://www.denverpost.com/technology/ci_23164841/youtube-has-already-defeated-tv-googles-eric-schmidt)). YouTube has recently passed 1 Billion visitors every month. But Schmidt adds "wait until you get 6 to 7 Billion viewers" when YouTube is available in the Third World. While YouTube was poised to "reinvent television programming" last year, Schmidt and other executives are now promoting YouTube as focused on "engagement."

Google also touts the fact that more 18-34 year olds watch YouTube than any cable network, and celebrated the recent DreamWorks Animation's purchase of the teen-focused YouTube network, Awesomeness TV. DreamWorks Animation secured the online YouTube platform mainly to showcase ([www.reuters.com/article/2013/05/01/dreamworks-awesomeness-idUSL2N0D11RB20130501](http://www.reuters.com/article/2013/05/01/dreamworks-awesomeness-idUSL2N0D11RB20130501)) their family-focused movie franchises, like *Shrek* and *Kung Fu Panda*. DWA paid \$33 million in cash, with additional payments of up to \$117 million if their earnings targets are met in 2014 and 2015. Awesomeness TV is a network of 55,000 YouTube channels, with 14 million subscribers.

In May 2013, The Daily Caller announced that YouTube is starting to charge viewer subscriptions ([news.yahoo.com/youtube-start-charging-viewers-subscription-fee-143227063.html](http://news.yahoo.com/youtube-start-charging-viewers-subscription-fee-143227063.html)) for up to 50 of its specialty channels. These YouTube specialty channels have been free with advertisements up until now, but Google wants to create a "subscription platform" to help pay for more and better content.

## App News

Right now we are drowning in applications, with more copies of copies or refined sub-apps popping up, than anything new and

revolutionary. But with recent revelations about massive government intrusions into private domestic communications, apps that prevent anyone from eavesdropping on cellphone calls have taken on added importance. eHow has some sensible tips to first determine if someone is eavesdropping ([www.ehow.com/how\\_7657638\\_stop-cell-phone-eavesdropping.html](http://www.ehow.com/how_7657638_stop-cell-phone-eavesdropping.html)) on your cellphone.

According to *Daily Caller*, there was a May 2013 release of a new app that claims to prevent the government from eavesdropping ([dailycaller.com/2013/06/06/new-app-claims-to-prevent-government-eavesdropping-on-cell-phones/](http://dailycaller.com/2013/06/06/new-app-claims-to-prevent-government-eavesdropping-on-cell-phones/)) on your cellphone. Developers in South Africa developed an app called Seecrypt ([www.seecrypt.com/](http://www.seecrypt.com/)) that supposedly protects cellphone users from having their calls and text messages tracked. However, other articles find inherent problems with Seecrypt ([www.hacker10.com/tag/seecrypt-review/](http://www.hacker10.com/tag/seecrypt-review/)), and suggest you stick with an older app, Kryptos ([kryptoscommunications.com/?module=faq](http://kryptoscommunications.com/?module=faq)). Both apps only work as peer-to-peer encryption, meaning both Caller and Receiver have to have the app.

In January 2013, the *Christian Science Monitor* reported that Facebook has zoomed past Google Maps to become the most used phone app ([www.csmonitor.com/Innovation/Horizons/2013/0123/Facebook-zooms-past-Google-Maps-to-become-the-most-used-phone-app-in-the-US?nav=87-frontpage-entryBloglist](http://www.csmonitor.com/Innovation/Horizons/2013/0123/Facebook-zooms-past-Google-Maps-to-become-the-most-used-phone-app-in-the-US?nav=87-frontpage-entryBloglist)). ComeScore ([www.comscore.com/](http://www.comscore.com/))'s Mobile Metrix report in late January showed that Facebook had climbed to 85 Million users by December 2012.

Also in January 2013, the *Washington Post* (through SiliconValley.com) reported on a new kind of monster face app ([www.siliconvalley.com/personal-technology/ci\\_22425925/new-drinking-mirror-app-shows-effects-alcohol-facial](http://www.siliconvalley.com/personal-technology/ci_22425925/new-drinking-mirror-app-shows-effects-alcohol-facial)). Drinking Mirror ([www.appsmenow.com/review/42914-Drinking\\_Mirror](http://www.appsmenow.com/review/42914-Drinking_Mirror)) is a free app from the Drink Smarter campaign by the Scottish government to make people more aware of how heavy drinking can affect your looks. After downloading the app, users can upload snapshots of themselves, and then enter information about their drinking habits. Then an aged photo is displayed of how the user might look if they continue drinking at their current rate.

In February 2013, Seattle Time's Brier Dudley previewed a new Zillow real estate platform ([seattletimes.com/html/technologybrierdudleysblog/2020294049\\_post\\_68.html](http://seattletimes.com/html/technologybrierdudleysblog/2020294049_post_68.html)). Called Zillow Digs, it lets people planning on remodeling their home peruse photos from the huge collection of home-interior photos that have been uploaded to Zillow over the years. It is available as both an iPad app and from Zillow's site ([www.zillow.com/digs/](http://www.zillow.com/digs/)).

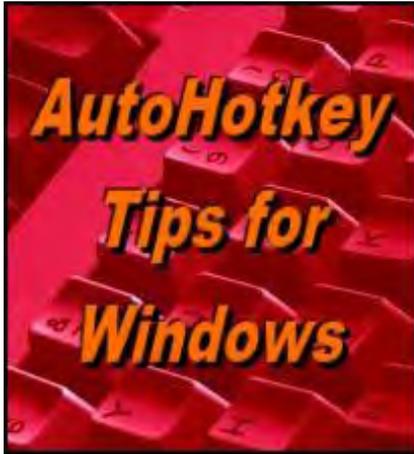
*The New York Times* in April 2013 ran an article about how Google is emulating Apple in restricting apps ([bits.blogs.nytimes.com/2013/04/16/google-releases-details-about-glass-for-app-developers/?hpw](http://bits.blogs.nytimes.com/2013/04/16/google-releases-details-about-glass-for-app-developers/?hpw)) for its new Google Glass. Similar to the way apps turned the iPhone into everything from a musical instrument to a glass of beer, Google has released extensive guidelines to software developers who want to build apps for their eyeglass-like Glass. Google wants to introduce the technology slowly, to deal with privacy concerns. So their guidelines forbid developers from selling ads in apps, collecting user data for ads, or sharing data with ad companies. Whether the public is ready to embrace wearable-computers, however, remains to be seen.

Marilyn is a freelance writer and humorist, with a special interest (besides computers and technology) in Science Fiction. Besides short stories published in various magazines, she also has some new e-books available on Amazon Kindle: *Hunting Monster Aliens* ([www.amazon.com/s/?\\_encoding=UTF8&camp=1789&creative=390957&field-keywords=Hunting%20Monster%20Aliens%20martin&linkCode=ur2&rh=n%3A133140011%2Ck%3AHunting%20Monster%20Aliens%20martin&tag=comput0b9-20&url=search-alias%3Ddigital-text](http://www.amazon.com/s/?_encoding=UTF8&camp=1789&creative=390957&field-keywords=Hunting%20Monster%20Aliens%20martin&linkCode=ur2&rh=n%3A133140011%2Ck%3AHunting%20Monster%20Aliens%20martin&tag=comput0b9-20&url=search-alias%3Ddigital-text)) is an on-going series of novellas, about a wise-cracking team of ghost investigators who occasionally turn into alien-monster hunters. *Culture Crash! A California Yankee Transplanted to Texas* ([www.amazon.com/gp/product/B00CKXF8GQ/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00CKXF8GQ&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B00CKXF8GQ/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00CKXF8GQ&linkCode=as2&tag=comput0b9-20)) is a collection of humor essays chronicling her adventures in her new home-state.

ComputerEdge E-Books has converted many of Marilyn's computer humor columns into four e-books.

Now available in a four-book Kindle bundle from Amazon.com *The Best Computer and Internet Humor, Anecdotes, and Jokes Found on the Web* ([www.amazon.com/gp/product/B00ACVX2PC/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00ACVX2PC&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B00ACVX2PC/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00ACVX2PC&linkCode=as2&tag=comput0b9-20)). Marilyn's collection of the funniest stories about our computing machines and how we use them at home, the office, and in cyber space. Save 25% off the individual book price!

[Return to Table of Contents](#)



**Yet, One More  
Reason to Use  
AutoHotkey  
Free Software!**

[Adding Menu Items to the System Tray the Easy Way](#)  
"Menu Items for QuikPlay Script Controls" by Jack Dunning

Jack is reminded that some people don't have the Windows key. Here is how to quickly add right-click menu items to the System Tray icon.

*If you've never heard of AutoHotkey and wonder what all the hullabaloo is about, then here is a short "Introduction to AutoHotkey ([www.computoredge.com/AutoHotkey/Introduction\\_AutoHotkey\\_Review\\_and\\_Guide\\_for\\_Beginners.html](http://www.computoredge.com/AutoHotkey/Introduction_AutoHotkey_Review_and_Guide_for_Beginners.html))" for newcomers.*

A quick question from Ron Cerrato (I keep forgetting that he doesn't have a Windows key (🌈) on his keyboard):

*It sure would be great if the four options (W, P, S, and N) [for the barebones QuikPlay media player app] were in the right-click menu. One reason is that I don't have a Windows key, but perhaps more importantly, I'm the habit of right-clicking for options since it's less confusing to me than trying to remember numerous key combinations that change with every app.*

Thanks for the reminder, Ron. I added the options to the right-click menu of the icon in the System Tray. Now if someone right-clicks on that AutoHotkey icon, all the options are available. I replaced the files (QuikPlay) posted for download ([www.dropbox.com/sh/4qu48lyqtixdg7t/QdMY1dNuy7](http://www.dropbox.com/sh/4qu48lyqtixdg7t/QdMY1dNuy7)).

I should do these things automatically. It is always good idea to have alternative methods for operating apps. There is no way anyone will remember all the hotkeys. I'll try to remember to add hotkey routines to the System Tray icon in any future examples.

Adding Labels (Subroutines) to the System Tray Right-click Menu

**Note for Beginners:** *Label is the term AutoHotkey uses for subroutines. In commands it is often expressed in the documentation as **gMySubroutine** or just **MySubroutine**. If the label is added at an option the letter "g" is placed before the name of the label (i.e. **gMySubroutine**). If the command, such as **Menu** used in the examples here, calls for the label directly, the letter "g" is not required before the label name (i.e. **MySubroutine**). The subroutine itself will appear somewhere in the AutoHotkey script outside of the main routine. It consists of the name of the label followed by a colon on the first line (i.e. **MySubroutine:**), followed by lines of code (if any), then terminated with a **Return** ([l.autohotkey.net/docs/commands/Return.htm](http://l.autohotkey.net/docs/commands/Return.htm)).*

I've addressed this topic in the past, but there are a couple more learning points this time. If you've already create hotkeys to run routines, then it's remarkably easy to add app controls to the right-click menu of the System Tray to run as subroutines. (The comments and lines of code in this column build upon last week's AutoHotkey column.) It merely a matter of adding the Menu, Tray, Add command ([l.autohotkey.net/docs/commands/Menu.htm](http://l.autohotkey.net/docs/commands/Menu.htm)) for each feature or control as shown:

```
Menu, Tray, Add, Pick What to Play, `!`#P
Menu, Tray, Add, What's Playing?, NotRunning
Menu, Tray, Add, Next, `!`#N
Menu, Tray, Add, Stop Play, `!`#S
```

Notice that only one line of code (*What's Playing* on the second line) includes a text name for the label (*NotRunning*). This is because every other routine is defined with only a hotkey combination. It's not commonly realized that the hotkey combination can be used as the label name. This saves redefining each routine with a separate text label. The only requirement is that the hotkey modifiers need to be escaped by preceding them with the accent mark ( ` ) so that they are read as the character they represent rather than a modifier.

For example, in the first line of code !#P (ALT++P) is the combination that calls the selection box for media files. Rather than creating another label name the line is written with both the ALT character (!) and the Windows key (#) preceded by the escape character (\! #P). This is how any hotkey combination can be called as a subroutine by any AutoHotkey command which uses a label (Gosub ([i.autohotkey.net/docs/commands/Gosub.htm](http://i.autohotkey.net/docs/commands/Gosub.htm)), Goto ([i.autohotkey.net/docs/commands/Goto.htm](http://i.autohotkey.net/docs/commands/Goto.htm)) and many other commands which use *Label* as a parameter).

Note: I generally avoid both the *Gosub* and *Goto* commands. When you resort to those types of calls the logic is often a little too loose. *Gosub* is an acceptable alternative when necessary because it will return to the original point where it was called in the script. However, *Goto*, which does not automatically return, is a sign of convoluted programming and should be avoided. Virtually all situations where someone is tempted to use one of these commands can be worked out better with the proper use of Functions ([i.autohotkey.net/docs/Functions.htm](http://i.autohotkey.net/docs/Functions.htm)), Loops ([i.autohotkey.net/docs/commands/Loop.htm](http://i.autohotkey.net/docs/commands/Loop.htm)), and other standard AutoHotkey commands. The *Label* parameter is available in so many of the AutoHotkey commands, that it would be rare to need the Gosub command.

Even though there is a hotkey combination for the *What's Playing?* System Tray menu item, it was created with the Hotkey command ([i.autohotkey.net/docs/commands/Hotkey.htm](http://i.autohotkey.net/docs/commands/Hotkey.htm)) and does not act as a label. Plus, since the label used in the script switches when a file starts playing, trying to set up a hotkey combination which is also a label would just complicate matters. It was easier to add the line:

```
Menu, Tray, Add,What's Playing?, WhatsPlaying
```

when the file starts playing and change it back to:

```
Menu, Tray, Add,What's Playing?, NotRunning
```

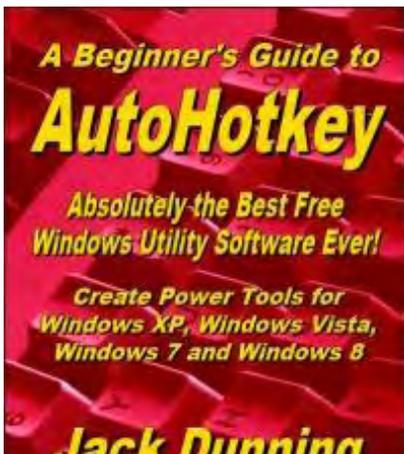
when the play stops.



One unexpected advantage to using the System Tray right-click menu was the ability to load multiple folders by adding a new folder to the playlist without totally ending the old playlist. If you recall from last time, while files were playing the original hotkey combination (ALT++P) was disabled. To start a new playlist, the old one needed to be stopped (ALT++S). The reason for this is that the SoundPlay command ([i.autohotkey.net/docs/commands/SoundPlay.htm](http://i.autohotkey.net/docs/commands/SoundPlay.htm)) pauses the current thread until it plays the last file. However, when selecting "Pick What to Play" from the System Tray right-click menu (seen at left), the main routine is run as a new thread which temporarily interrupts the SoundPlay of the current thread. You can pause the play of one set of files with the "Pick What to Play" option to start another list. Once the new list finishes, the original list will restart with the file after the interrupted file. You do lose the remaining play of the interrupted file, but otherwise a number of folders can be stacked as continuous play.

The current *QuikPlay.ahk* file with these changes can be found at the *ComputerEdge* AutoHotkey Dropbox download site ([www.dropbox.com/sh/4qu48lyqtixdg7t/QdMY1dNuy7](http://www.dropbox.com/sh/4qu48lyqtixdg7t/QdMY1dNuy7)).

\* \* \*



Now available in e-book format from Amazon, Jack's *A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!*: *Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8* ([www.amazon.com/gp/product/B009SI3F52/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B009SI3F52/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20)).

Building Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8, AutoHotkey is the most powerful, flexible, *free* Windows utility software available. Anyone can instantly add more of the functions that they want in all of their Windows programs, whether installed on their



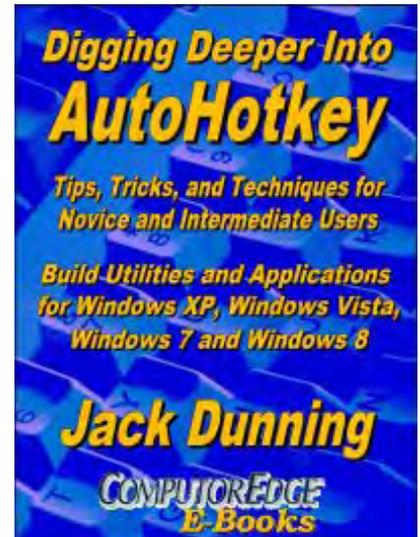
computer or while working on the Web. AutoHotkey has a universality not found in any other Windows utility—free or paid.

Based upon the series of articles in *ComputerEdge*, Jack takes you through his learning experience as he explores writing simple AutoHotkey scripts for adding repetitive text in any program or on the Web, running programs with special hotkeys or gadgets, manipulating the size and screen location of windows, making any window always-on-top, copying and moving files, and much more. Each chapter builds on the previous chapters.

For an EPUB (iPad, NOOK, etc.) version of A Beginner's Guide to AutoHotkey click here! ([computoredgebooks.com/A-Beginners-Guide-to-AutoHotkey-EPUB-format-iPad-Nook-etc-AUTOHOTKEY-1.htm](http://computoredgebooks.com/A-Beginners-Guide-to-AutoHotkey-EPUB-format-iPad-Nook-etc-AUTOHOTKEY-1.htm))

\* \* \*

My new AutoHotkey book which is comprised of updated, reorganized and indexed columns from the last six months is now available at Amazon for Kindle hardware ([www.amazon.com/gp/product/B00CTACUMK/ref=as\\_li\\_ss\\_tl?](http://www.amazon.com/gp/product/B00CTACUMK/ref=as_li_ss_tl?)



[ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B009SI3F52/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20)) (or free software) users. Since the columns were not all written in a linear fashion, the book has been reorganized and broken up into parts by topic. The book is not for the complete beginner since it builds on the information in *A Beginner's Guide to AutoHotkey* ([www.amazon.com/gp/product/B009SI3F52/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B009SI3F52/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20)). However, if a person is reasonably computer literate, they could go directly to this book for ideas and techniques without the first book.

If you've been following along with my AutoHotkey columns, then there is little new information in the book (although I have added more clarification for techniques I felt were either confusing or wrong). The only reason I can see to buy it would be as a handy reference. The AutoHotkey commands used are included in a special index to the chapters in which they appear. Even I can't remember everything I wrote.

For an EPUB (iPad, NOOK, etc.) version of Digging Deeper into AutoHotkey click here! ([computoredgebooks.com/Digging-Deeper-into-AutoHotkey-EPUB-format-iPad-Nook-etc-AUTOHOTKEY-2.htm](http://computoredgebooks.com/Digging-Deeper-into-AutoHotkey-EPUB-format-iPad-Nook-etc-AUTOHOTKEY-2.htm))

---

Jack is the publisher of *ComputerEdge* Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called *The Byte Buyer*. His Web site is [www.computoredge.com](http://www.computoredge.com). He can be reached at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com). Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:

Just Released! *Hidden Windows Tools for Protecting, Problem Solving and Troubleshooting Windows 8, Windows 7, Windows Vista, and Windows XP Computers* ([www.amazon.com/gp/product/B00B8Z2ASG/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00B8Z2ASG&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B00B8Z2ASG/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B00B8Z2ASG&linkCode=as2&tag=comput0b9-20)).

Now at Amazon! Jack's *A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8* ([www.amazon.com/gp/product/B009SI3F52/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B009SI3F52/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009SI3F52&linkCode=as2&tag=comput0b9-20)).

Our second compilation of stupid *ComputerEdge* cartoons from 2011 and 2012 is now available at Amazon! *That Does*

*Not Compute, Too! ComputerEdge Cartoons, Volume II: "Do You Like Windows 8 or Would You Prefer an Apple?"* ([www.amazon.com/gp/product/B009JY65QQ/ref=as\\_li\\_ss\\_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009JY65QQ&linkCode=as2&tag=comput0b9-20](http://www.amazon.com/gp/product/B009JY65QQ/ref=as_li_ss_tl?ie=UTF8&camp=1789&creative=390957&creativeASIN=B009JY65QQ&linkCode=as2&tag=comput0b9-20))

Currently only at Amazon.com, *Jack's Favorite Free Windows Programs: What They Are, What They Do, and How to Get Started!* ([www.amazon.com/gp/product/B008BLUZRS/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=comput0b9-20](http://www.amazon.com/gp/product/B008BLUZRS/ref=as_li_ss_tl?ie=UTF8&tag=comput0b9-20)).

Available from Amazon, *Misunderstanding Windows 8: An Introduction, Orientation, and How-to for Windows 8* ([www.amazon.com/gp/product/B007RMCRH8/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=comput0b9-20](http://www.amazon.com/gp/product/B007RMCRH8/ref=as_li_ss_tl?ie=UTF8&tag=comput0b9-20))! Also available at Barnes and Noble ([www.barnesandnoble.com/w/misunderstanding-windows-8-jack-dunning/1109995715?ean=2940014229463](http://www.barnesandnoble.com/w/misunderstanding-windows-8-jack-dunning/1109995715?ean=2940014229463)) and ComputerEdge E-Books ([www.computoregedgebooks.com/Windows-Tips-and-Tricks\\_c4.htm?sourceCode=writer](http://www.computoregedgebooks.com/Windows-Tips-and-Tricks_c4.htm?sourceCode=writer)).

Available exclusively from Amazon, *Windows 7 Secrets Four-in-One E-Book Bundle* ([www.amazon.com/gp/product/B00801M5GS/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=comput0b9-20](http://www.amazon.com/gp/product/B00801M5GS/ref=as_li_ss_tl?ie=UTF8&tag=comput0b9-20)),  
*Getting Started with Windows 7: An Introduction, Orientation, and How-to for Using Windows 7* ([www.amazon.com/gp/product/B007AL672M/?&tag=comput0b9-20](http://www.amazon.com/gp/product/B007AL672M/?&tag=comput0b9-20)),  
*Sticking with Windows XP—or Not? Why You Should or Why You Should Not Upgrade to Windows 7* ([www.amazon.com/gp/product/B00758J4L6/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=comput0b9-20](http://www.amazon.com/gp/product/B00758J4L6/ref=as_li_ss_tl?ie=UTF8&tag=comput0b9-20)),  
and *That Does Not Compute!* ([www.amazon.com/gp/product/B0052MMUX6/ref=as\\_li\\_ss\\_tl?ie=UTF8&tag=comput0b9-20](http://www.amazon.com/gp/product/B0052MMUX6/ref=as_li_ss_tl?ie=UTF8&tag=comput0b9-20)),  
brilliantly drawn cartoons by Jim Whiting for really stupid gags by Jack about computers and the people who use them.

---

---

[Return to Table of Contents](#)



## Wally Wang's Apple Farm

“A Supercomputer on Your Desk” by Wally Wang

A Supercomputer on Your Desk; The New Laptop Standard; The Problem with Microsoft (From the Inside); The Importance of Native Controls; The Government is Watching You; The Future of Blackberry and Windows Phone 7; See All Drives in Your Computer.

# Wally Wang's Apple Farm

After ignoring the professional computing market for years, Apple finally updated the Mac Pro ([www.apple.com/mac-pro/](http://www.apple.com/mac-pro/)). First, the Mac Pro will be the first Macintosh completely assembled in the United States by American workers (or at least people living in America). More importantly, Apple claims the new Mac Pro can use up to 60GB of RAM and run at 7 teraflops. If you look at this list ([www.top500.org/list/2003/06/?page=1](http://www.top500.org/list/2003/06/?page=1)) of the fastest supercomputers in 2003, you'll see that today's Mac Pro would have ranked as the 8th fastest supercomputer in 2003.



Figure 1. The latest Mac Pro can run at 7 teraflops.

While the cost and availability for the new Mac Pro still remains a mystery, the current Mac Pro models sell for \$2,700-\$3,800, so the new Mac Pro should cost less than \$6,000, depending on how much RAM you stuff in it. In 2003, a supercomputer likely cost way more than what the newest Mac Pro will cost when Apple eventually reveals the price. Even more remarkable is that if you combine the Mac Pro's computing power with OS X 10.9 Mavericks' power saving features, the latest Mac Pro gives you an incredible amount of computing power in return for lower electricity consumption and a somewhat reasonable price compared to the price of supercomputers in the past.

Most likely, few people will be able to take advantage of the Mac Pro's power. Someone just browsing the Internet or typing a letter doesn't need a Mac Pro. However, the Foundry created a 3D digital painting tool called MARI ([www.thefoundry.co](http://www.thefoundry.co)).

[uk/articles/2013/06/10/536/mari-is-coming-to-the-mac/](#)) that the company ported to run on OS X. The company's developers got a chance to use the Mac Pro in secret to test their Macintosh version of MARI, which is used to create graphics for movies and video games.

Jack Greasley, MARI product manager at The Foundry, said this about using the Mac Pro that "Mari running on this machine out of the box is the fastest I have ever seen it run."

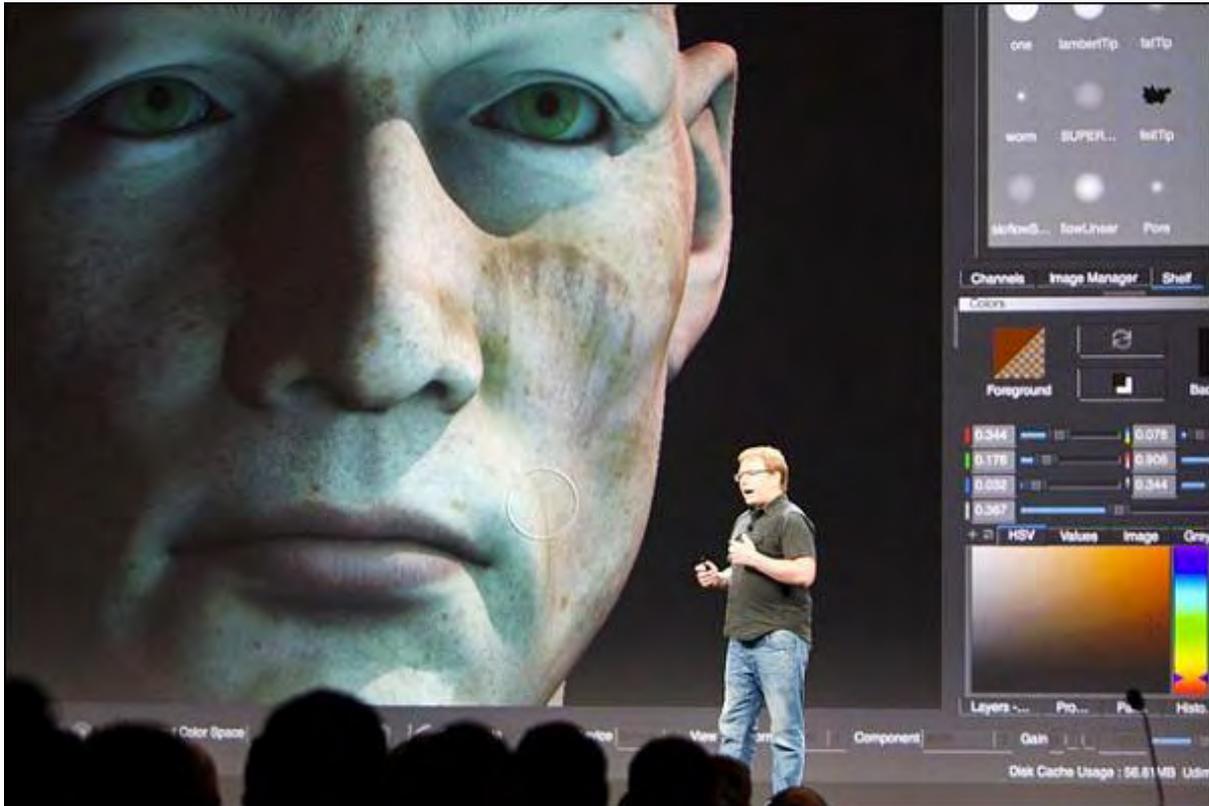


Figure 2. MARI creates digital special effects for movies.

For professional computing users, the Mac Pro is what they need to perform computing-intensive tasks like video editing, which is a task that an iPad will always be unsuited to do. For most people, the power of a Mac Pro will be overkill, making an iMac or Mac mini far more cost effective. While the idea of having the 8th fastest supercomputer in 2003 on your desk is appealing, eventually the power of a 2003 supercomputer will trickle down to the iMac and Mac mini in the near future.

When measured against the supercomputers of the 90s, the iPad 2 would have even made the top ten list ([www.tuaw.com/2011/05/09/ipad-2-would-have-bested-1990s-era-supercomputers/](#)) of supercomputers. If the power of a 2003 supercomputer can reach the ordinary person in ten years, what will the next ten years bring? (Hint: It probably won't be a netbook with a replaceable battery and the ability to run Adobe Flash.)

## The New Laptop Standard

In the old days, laptops only lasted a few hours before you either had to plug them in again or slap in a spare battery. The need to carry around a spare battery is why so many people insisted that iPads and MacBook Pro and MacBook Air laptops were useless because they didn't allow a replaceable battery. However, there's no reason to lug around a spare battery if your laptop battery can last all day.

*PC Magazine* recently gave the MacBook Air their Editor's Choice award ([www.pcmag.com/article2/0,2817,2420468,00.asp](#)) specifically because the MacBook Air gives you battery life capable of lasting all day, although Apple officially claims that the 11-inch MacBook Air will give you 9 hour of battery life while the 13-inch MacBook air will give you 12 hours of battery life.

**Up to 12 hours of battery life.**  
It won't call it a day until you do.

The 11-inch MacBook Air now lasts up to 9 hours between charges and the 13-inch model lasts up to an incredible 12 hours. So from your morning coffee till your evening commute, you can work unplugged. When it's time to kick back and relax, you can get up to 10 hours of iTunes movie playback on the 13-inch model and up to 8 hours on the 11-inch model. And with up to 30 days of standby time, you can go away for weeks and pick up right where you left off.

[Learn more >](#)

Figure 3. The MacBook Air's battery can last a full working day on a single charge.

By using Intel's new low-power Haswell processors, other laptop manufacturers can likely boost the battery life of their laptops too, but they'll need to get close to the 9 hour mark set by the 11-inch MacBook Air. When OS X 10.9 Mavericks arrives with its additional operating system power conserving features, you can expect a MacBook Air to last even longer on a single charge.

Laptops need to last all day without worrying about constantly plugging them in and the MacBook Air brings this dream closer to reality. Now we just have to wait to see what other laptop manufacturers will do to achieve the same battery life and remain competitive, but until then, every other laptop suddenly looks woefully obsolete.

### The Problem with Microsoft (From the Inside)

Everyone has an opinion about Microsoft, but Jennie Locati's opinion ([www.bizjournals.com/seattle/blog/techflash/2013/06/former-xbox-director-to-save.html?page=all](http://www.bizjournals.com/seattle/blog/techflash/2013/06/former-xbox-director-to-save.html?page=all)) holds greater credibility because she used to work at Microsoft as a manager in the Xbox division. As Jennie points out, the problem isn't that Microsoft doesn't have talented people. The problem is that Microsoft's management doesn't listen to them.

"People are pushed to not recognize innovation if it's not on the Microsoft platform," Locati said. "If you acknowledge the value of another platform or product, you get called out for it. It's a very bizarre environment."

This attitude isn't any different from the pro-Windows crowd that defiantly refuses to acknowledge anything good about rival products like Apple, and even more fervently, denies any flaws with any Microsoft products. How is this any different from rabid pro-Apple fanatics who can only see Apple doing everything right and never doing anything wrong? Both sides are basically looking only for evidence that supports their view while completely ignoring any evidence that contradicts their beliefs.

The fact is that during the 90s and much of the 2000s, Windows PCs dominated because they were the best option available at the time. Now with greater competition from OS X, iOS, Linux, Android, and Chrome OS, Windows isn't always the best solution for everyone. Generally the defense of Windows begins with denial by refusing to even consider any possible benefits of rival products.

Too many pro-Windows supporters have spent an extraordinary amount of time using Windows so they're familiar with its quirks. As a result, they have no problems using Windows and so they believe if they have no problems using Windows, then nobody else on the planet should ever have any problems either.

Because pro-Windows users have spent so much time using Windows, they're unlikely to have spent an equal amount of time using any competing product such as Linux or OS X. If you don't know much about a rival, how can you intelligently criticize it? In most cases, they simply rely on myths and fabrications in lieu of actual facts.

That doesn't mean that Windows doesn't have its advantages over rival products, but it also doesn't mean that rival products may not offer superior benefits over Windows. By refusing to acknowledge this simple fact, fanatics on both sides maintain their delusional beliefs by denying any evidence that contradicts their cherished opinions.

As Jennie Locati and many other ex-Microsoft employees have stated over the years, one huge problem is that Microsoft stifles their own people ([www.vanityfair.com/business/2012/08/microsoft-lost-mojo-steve-ballmer](http://www.vanityfair.com/business/2012/08/microsoft-lost-mojo-steve-ballmer)) from innovating by pitting individuals and divisions against each other. Rather than working together as a team, Microsoft pits their separate divisions against

each other so the company works against itself. The biggest competitor to Microsoft isn't Apple or Google, but themselves.

"The company is just so broken," Locati said. "It is truly a case of too many fish in too small a pond. There's not enough air."

Despite such internal turmoil, expect Microsoft to continue stumbling along with a handful of successes and a lot of momentum. If you've ever worked for a large company that makes illogical decisions while the workers suffer and get the blame while the executives get all the money and take all the credit, then you may recognize that Microsoft probably isn't any different than most large companies in America.

## The Importance of Native Controls

If you're going to write apps for the iPhone or iPad, the most powerful (and most complicated) solution is to use Apple's free Xcode compiler and write your app using Objective-C. The huge advantage of using Objective-C and Xcode is that your apps will automatically change its appearance when Apple introduces iOS 7.

If you have an app that retains its original look despite the visual changes in iOS 7 that means the developer used a different programming tool that didn't use what's called "native controls." Native controls basically means that the programming tool uses the Cocoa Touch framework, which is a library of Objective-C code that Apple has created to define the appearance and behavior of iOS apps. If a programming tool uses "native controls," every time Apple changes the appearance of iOS, your app's appearance automatically changes without any extra effort on your part.

Many programming tools "cheat" by not using native controls. Instead, they let you create an iOS user interface that looks like native controls. However, each time Apple changes the appearance of iOS, the app still continues mimicking the appearance of the previous version of iOS.

In addition, native controls come with built-in features that most people expect such as spell checking. If a programming tool doesn't use native controls, you not only have to mimic the appearance of native controls, but also the behavior. For many programming tools, this requires either writing additional code or buying a third-party add-on, which simply complicates the programming task.

That means if you're developing apps for iOS, you want to use a programming tool that uses native controls since that will completely eliminate the need to update your app's user interface and behavior every time Apple changes iOS. If torturing yourself with Objective-C and Xcode isn't your idea of a good time, you can choose two other programming tools like LiveCode ([www.livecode.com](http://www.livecode.com)) or Xojo ([www.xojo.com](http://www.xojo.com)).

Both programming tools have limitations. LiveCode currently lets you write a program and compile it for Android and iOS. The big problem is that it doesn't use native controls. That means any iOS apps developed with LiveCode could retain an antiquated look when iOS 7 appears. That won't affect the actual function of the app, but it may risk making the app look dated.

The current problem with Xojo is that it won't let you create iOS apps yet (iOS support should appear by December 2013). However when that feature arrives later this year, Xojo will use native controls so your app, created with Xojo, will change its appearance every time Apple changes iOS.

As a developer, you want to use a programming tool that uses native controls. As a consumer, you'll be able to tell which apps used native controls ([www.forbes.com/sites/ewanspence/2013/06/15/the-threat-and-the-opportunity-of-ios-7-for-developers/](http://www.forbes.com/sites/ewanspence/2013/06/15/the-threat-and-the-opportunity-of-ios-7-for-developers/)) and which ones don't by seeing if they change their user interface each time Apple changes iOS.

## The Government is Watching You

After Edward Snowden revealed the United States government's involvement in tracking the phone records of its citizens, people might be concerned about their privacy while they willingly post pictures of themselves on Facebook. If you're really worried about privacy, the simplest solution is to stop using a computer. The second simplest solution is to be careful what information you give over the computer, such as what pictures and information you share with the whole world through a social media network like Twitter or LinkedIn.

If you're worried about the government tracking your search queries, you probably want to avoid Google and Bing, and use DuckDuckGo ([www.nbcnews.com/technology/wary-tracking-users-flock-duckduckgo-6C10321830](http://www.nbcnews.com/technology/wary-tracking-users-flock-duckduckgo-6C10321830)) instead. While Google and Bing share user information with advertisers, DuckDuckGo does not track IP addresses of computers or track user information typed into DuckDuckGo. If you find DuckDuckGo provides answers to your questions just as well as Google or Bing, you might as well make DuckDuckGo your default search engine.

If you're worried about someone reading your e-mail, switch to the free HushMail ([www.hushmail.com](http://www.hushmail.com)) that encrypts all your messages so you don't have to do it yourself. By encrypting your messages, HushMail keeps strangers from reading your e-mail.

If you're one of the few people on the planet who actually believes that your government only works for your benefit, you won't need to worry about protecting your privacy. However, if you're like most people who see the government as more of a threat than a help, then you might want to start guarding your privacy more carefully in the future.

### The Future of Blackberry and Windows Phone 7

While wandering around China, I saw plenty of ads for Android phones and the iPhone. I don't recall seeing a single ad for a Blackberry or Windows Phone 7 phone. Most likely the bombardment of Android and iPhone ads simply reflects the market in China where people either use Android or iOS, just like in America.



Figure 4. An Android ad posted in a public rest room.

The advertisement is for the iPhone 5, promoted by China Telecom. It features the following elements:

- Logos:** The 'Tianyi Surfing' logo (天翼 surfing) with the tagline '36 互联网手机' (36 Internet Mobile Phone) is on the top left. The 'China Telecom' logo (中国电信 CHINA TELECOM) with the tagline '世界触手可及' (World is within reach) is on the top right.
- Headline:** The main title is '电信 iPhone 5' (China Telecom iPhone 5) in large black characters.
- Image:** A black iPhone 5 is shown in the center-left, displaying its home screen with various app icons.
- Key Features:** Three red bullet points highlight the phone's benefits:
  - 信号好 (Good signal)
  - 保密强 (Strong security)
  - 辐射低 (Low radiation)
- Promotional Text:** A red stamp-like graphic at the bottom right contains the text '卓越天翼 用5之地' (Excellent Tianyi, the place to use 5).
- Footer:** Small text at the bottom includes '客户至上 用心服务 Customer First Service Forever' and other fine print.

Figure 5. An iPhone ad at a toll booth.

Since China represents one of the largest markets in the world, the near invisibility of Blackberry or Windows Phone 7 phones doesn't create a promising future for either phone. Blackberry should be especially concerned since at one time they were the only smartphone leader on the planet. Now Blackberry is nothing more than an afterthought.

Windows Phone 7 at least has the excuse that it's fairly new and still growing. Unlike Blackberry that fell from the top and needs to claw its way back to relevance again, Windows Phone 7 started at the bottom so it can go nowhere but up. The only question is how fast will Windows Phone 7 be able to grow before the combination of Android and iOS crushes it completely.

One reason why Chinese users might shy away from Windows Phone 7 is its lack of native support for character recognition. With the iPhone, you can modify the virtual keyboard to accept hand drawn Chinese characters. With Windows Phone 7, such character recognition appears to come only with an additional cost.

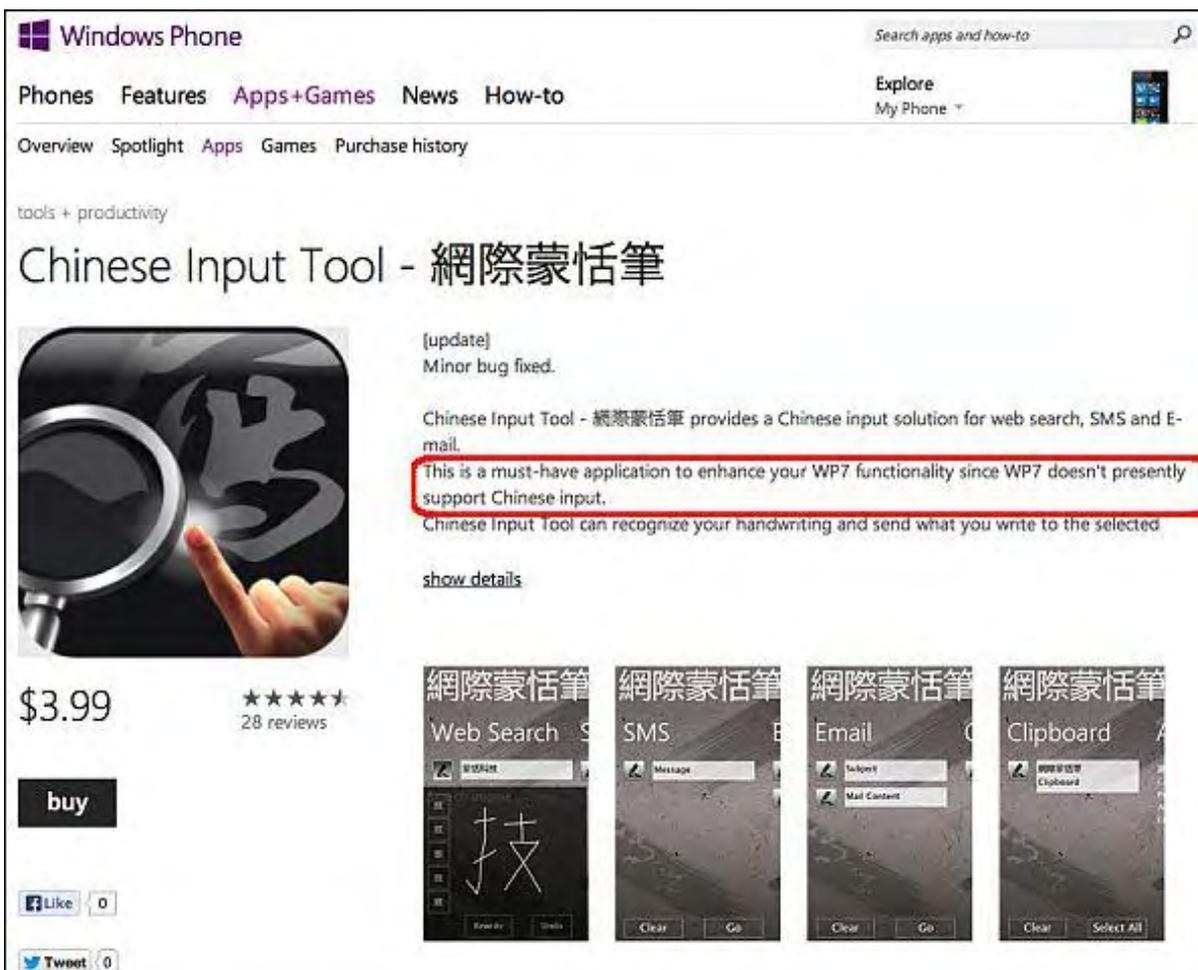


Figure 6. Adding Chinese character recognition costs money for Windows Phone 7 users.

If anyone has a Windows Phone 7 phone, perhaps they can verify if Microsoft really did omit Chinese character recognition as a built-in feature of Windows Phone 7. Trying to sell a smartphone in China that doesn't support all types of Chinese input is just as bad as Detroit automakers trying to sell cars in Japan with the steering wheel on the wrong side. When American companies don't adapt their products to overseas markets, how can they expect to sell any products at all?

\* \* \*

If you have multiple disks connected to your Macintosh, trying to view them in the Finder window can be a bit clumsy. One way to see all the drives connected to your Macintosh is to click the Finder icon on the Dock and when a Finder window appears, choose Go > Computer, or press Shift+Command+C. Now the Finder window lists all the drives in your computer.



Figure 7. The Finder window can show you all the drives connected to your Macintosh.

In the early days, before Wally became an Internationally renowned comedian, computer book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling particples with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

*My New Mac, Lion Edition* ([www.amazon.com/gp/product/1593273908/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=1593273908](http://www.amazon.com/gp/product/1593273908/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=1593273908))

*My New iPad 2* ([www.amazon.com/gp/product/159327386X/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=159327386X](http://www.amazon.com/gp/product/159327386X/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=159327386X))

*Steal This Computer Book* ([www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050](http://www.amazon.com/gp/product/1593271050?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1593271050))

*Microsoft Office 2010 For Dummies* ([www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987](http://www.amazon.com/gp/product/0470489987?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470489987))

*Beginning Programming for Dummies* ([www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702](http://www.amazon.com/gp/product/0470088702?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470088702))

*Beginning Programming All-in-One Reference for Dummies* ([www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541](http://www.amazon.com/gp/product/0470108541?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0470108541))

*Breaking Into Acting for Dummies with Larry Garrison* ([www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468](http://www.amazon.com/gp/product/0764554468?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=0764554468))

*Strategic Entrepreneurism with Jon and Gerald Fisher* ([www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894](http://www.amazon.com/gp/product/1590791894?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1590791894))

*How to Live with a Cat (When You Really Don't Want To)* ([www.amazon.com/gp/product/B006DJYL70/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=B006DJYL70](http://www.amazon.com/gp/product/B006DJYL70/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=B006DJYL70))

*The Secrets of the Wall Street Stock Traders* ([www.amazon.com/gp/product/B006DGCH4M/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=B006DGCH4M](http://www.amazon.com/gp/product/B006DGCH4M/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=217145&creative=399373&creativeASIN=B006DGCH4M))

*Mac Programming For Absolute Beginners* ([www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362](http://www.amazon.com/gp/product/1430233362?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=1430233362))

*Republican Fairy Tales (Children's Stories the 1% Tell About the Rest of Us)* ([www.amazon.com/gp/product/B006QSKM3A/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B006QSKM3A](http://www.amazon.com/gp/product/B006QSKM3A/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B006QSKM3A))

*The Zen of Effortless Selling with Moe Abdou* ([www.amazon.com/gp/product/B006PUFPGI/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B006PUFPGI](http://www.amazon.com/gp/product/B006PUFPGI/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B006PUFPGI))

*The 15-Minute Movie Method* ([www.amazon.com/gp/product/B004TMD9K8/ref=as\\_li\\_tf\\_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8](http://www.amazon.com/gp/product/B004TMD9K8/ref=as_li_tf_tl?ie=UTF8&tag=the15minmovme-20&linkCode=as2&camp=1789&creative=9325&creativeASIN=B004TMD9K8))

*Erotophobia (A novel)* ([www.amazon.com/gp/product/B009POEAJO/ref=as\\_li\\_qf\\_sp\\_asin\\_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=B009POEAJO&linkCode=as2&tag=the15minmovme-20](http://www.amazon.com/gp/product/B009POEAJO/ref=as_li_qf_sp_asin_tl?ie=UTF8&camp=1789&creative=9325&creativeASIN=B009POEAJO&linkCode=as2&tag=the15minmovme-20))

In his spare time, Wally likes blogging about movies and writing screenplays at his site "The 15 Minute Movie Method. ([www.15minutemoviemethod.com/](http://www.15minutemoviemethod.com/))" Wally can be reached at [wally@computoredge.com](mailto:wally@computoredge.com).

---

---

[Return to Table of Contents](#)



## Worldwide News & Product Reviews

“The latest in tech news and hot product reviews.”  
by Charles Carr

- 🌐 Don't say we didn't warn you.
- 🌐🌐 What is that store's return policy?
- 🌐🌐🌐 We've seen better; we've seen worse.
- 🌐🌐🌐🌐 You'll probably be happy you did.
- 🌐🌐🌐🌐🌐 What are you waiting for?

Build a Better-Than-Xbox-One or -PS4 PC for (Pretty) Cheap; Researcher: Personal Communication Needed More Than Ever; Shareholder Meeting Question: Why Does Amazon Ban Guns, but Not Extremely Violent Videos and Games?; Portable EEG Device for Consumers; Samsung Galaxy S 4 Cell Phone (AT&T).

### Build a Better-Than-Xbox-One or -PS4 PC for (Pretty) Cheap

Over at the gaming site, Rock, Paper, Shotgun, Alec Meer soothes the egos of PC owners nervously eyeing the pretty amazing specs of the next generation of consoles:

Obviously you can't build your own Xbox One or PlayStation 4—they use some custom hardware not available to PC-builders to do their next-generation thing, they're running bespoke operating systems (and all the horror-DRM that goes with it) and contain it all with in a comparatively small black monolith that sits underneath your TV. Additionally, console games can be made to specific hardware requirements, which can entail a far great degree of optimization than trying to target a hundred thousand million different PC configs.

No matter what the console generation, the PC comparison can never be an exact one. What you *can* do, though, is build yourself a PC that has a little more grunt under the hood than these apparent future-machines, for pretty much the same amount of money.

To be honest, the major complications in price-matching the new consoles is case, power supply, hard drive and operating system—the core components of processor, motherboard, graphics card and memory come in at the right price. If you do have anything you can recycle, including an existent copy of Windows, it's going to help. Let's not factor in a monitor though, unless you've spotted somewhere that gives you a free HDTV when you buy an Xbox One or PlayStation 4.



Let's start with CPU. As resident hardware sage Jeremy rightfully sneered recently, Intel's new Haswell processors are a pretty pitiful step forward from their previous generation of chips on the desktop (the idea is they'll be more worthwhile in laptops, due to their power-saving aptitude and improved integrated graphics). However, if you're building your own PC right now, you might as well get one—it's your best bet in terms of future proofing, as it controversially introduces the new socket LGA 1150, which will hopefully stick around for a couple more processor generations—so you can upgrade to something meatier down the line. I'm going to recommend the 3GHz, quad core Haswell Core i5-4430, but to be honest that's a much stronger chip than the eight-core AMD Jaguar in the Xbox One and PS4.

If you're wondering how it could be eight cores good, four cores better [according to a colleague], "The eight core AMD Jaguar CPU, even if you had all eight cores available for playing games, would still be roughly half as fast as a current quad-core Intel CPU. The only slight issue is threading, but I would say the absolute best case scenario is that the console CPU will be half the performance of an Intel quad."

You'll need to plonk 8GB of DDR3, 1600MHz RAM into there—same quantity as on console, although the PS4 has the much faster GDDR5 type. No, you don't need any more than that—games won't use it

Now for the big, expensive part. While they're both touting AMD-ATI graphics processors, neither the Xbox One nor the PS4 use an exact match for an existing PC graphics card. However, the best of the pair, Sony's effort, with its 1152 shaders, isn't far off an AMD-ATI Radeon 7870 with 1280. If you'd prefer join Team Green, the NVIDIA GeForce GTX 660 Ti has 1344, but it's also a little pricier.



[All of that gets you a PC for less money] than an unquestionably lesser Xbox One, and with the infinitely greater flexibility of a PC. This is not a sub-par system, either: it's one that will chew through almost anything at 1080p on high settings.



Noticeably absent still is a hard drive. With the arguable exception of a new graphics card, switching from old world platter-based drives to an SSD is the single most effective PC upgrade there is. Unfortunately stretching to a 256GB drive, let alone higher, takes us too far above our budget, but Samsung's reliably tasty 128GB 840 SSD can be had for [about \$120].

Great piece. Read it all at [www.rockpapershotgun.com](http://www.rockpapershotgun.com) ([www.rockpapershotgun.com/2013/06/14/build-a-next-gen-pc/](http://www.rockpapershotgun.com/2013/06/14/build-a-next-gen-pc/)).

[rockpapershotgun.com/2013/06/14/build-a-next-gen-pc/](http://www.rockpapershotgun.com/2013/06/14/build-a-next-gen-pc/).

## Researcher: Personal Communication Needed More Than Ever



Award-winning independent public relations and communication specialist Miti Ampoma writes in this week with excerpts from her new book, "The Innovative Communicator," including some excellent tips to help keep the social networking beast at bay:

What's your first choice of communication when you need to get in touch with someone? Do you frequently opt for social media? Does it feel more natural to communicate this way than it does to pick up the phone and have a conversation or meet to talk face to face? How much time do you spend a day using social media? Is communicating this way a habit, just the way it is? If so you're not alone. The question is, is it good for you?

A recent UK study found that modern technology, social media included, is making face to face human communication redundant. Almost half of those sampled admitted they used phone calls, text messages, tweets and e-mails to communicate with family members in the same house rather than going into another room to talk to them face to face! We have a generation growing up brilliant at social media but addicted to it.

Many young people struggle to look a person in the eye to have a socially interactive articulate conversation. Yet meaningful relationships, the centerpiece of family life and day to day living, are lost when there is insufficient face to face interactive human dialogue, leading to misunderstandings, discord, confusion, potential distrust and ultimately relationship breakdown.

Don't get me wrong, social media is a great gift, but it's worth balancing our use of it with meaningful face to face communication, so that the technology supports our relationships, rather than dominate or take them over. We all need balance in whatever we do in life and the same applies to our use of and increasing over reliance on social media.

Strong communication is what connects our souls, bonds, motivates, inspires and through which parents teach their children the essential life values of honesty and integrity. In short, better effective face to face communication is integral to a successful life. No amount of clever social media can replace this.

So while social media is all well and good, it's worth balancing your life and your kid's use of it with meaningful face to face communication. Don't let social media control your life. You want the technology to support your relationships and to achieve that, balance is the key.

Top tips:

- If you're welded to social media, start by ring fencing 2 hours in the week (you can split the time) and allocate that to human face time
- Increase the 2 hours by another hour or two over the weekend, so you and your friends and family have concentrated social media free time together
- Better still, have one whole day in the weekend with no social media. Just be and enjoy the company of friends and family
- This may sound obvious but talk to each other! Delve beyond the surface of superficial conversations. Find out what's bringing joy as well as sadness, what's made a great day or not for your friends or loved ones. Make this a habit. Research shows that honest in depth conversations are not happening enough
- If you're relaxing, switch off your social media and other tech devices to silent. This means switch off the bleeper, ringtone, reminder flash button and vibration mode too!

- As a family or on your own, try relaxation techniques like yoga and meditation where the exercise is great for you and you learn to be comfortable with silence
- Have a face to face conversation with friends and family members if you are in the same house!
- Have a face to face conversation with work colleagues. If you are sitting next to each other or close by have a conversation rather than e-mail them or send a message via social media.
- With practice and consistent effort, these simple social media free tips will soon feel natural and right and your relationships will be much healthier for it. If you're a parent you'll be a role model for your children. Start practicing from today to see and feel the difference and enjoy the benefits in your life.

### *The Innovative Communicator*

By Miti Ampoma

190 pages

Paperback 6x9, retail price: \$14.99

Hardcover 6x9, retail price: \$30.95

E-book, retail price: \$3.99

ISBN: 9781452556840

### Shareholder Meeting Question: Why Does Amazon Ban Guns, but Not Extremely Violent Videos and Games?

However you feel about the role a free market plays in curtailing violence, what follows is a fascinating recounting of an exchange at a recent Amazon shareholder's meeting between National Center for Public Policy Research ([www.nationalcenter.org](http://www.nationalcenter.org)) member Horace Cooper and company's CEO, Jeff Bezos:

"Mr. Bezos, a research associate with our institution developed, using data from independent third-parties, a list of the 'Top 10 Most Violent Video Games' and another list of the 'Top Ten Most Violent Movies' of all time," said Cooper at the meeting.

"Having compiled the list, and having no idea which, if any, of these products would be for sale on Amazon, she then looked to see if Amazon sells them. Guess what? It sells not a third of them, not half of them, but each and every one of them. I won't even tell you what is in the film *Cannibal Holocaust*, but if you're curious, they are selling it for \$22.50. If you want the most violent video game, Manhunt, you're in luck.

"What Amazon describes as an exploration of 'the depths of human depravity in a vicious, sadistic tale of urban horror,' is not only available on Amazon, you sell Manhunt 2 as well. Apparently it is the go-to game for people who want to, as Amazon's product page puts it, 'execute their kills in three deadly threats—Hasty, Violent and Gruesome.'

"Mr. Bezos, many make the argument that selling an item does not make the seller responsible for it. If a teenager plays hundreds of hours of games that consist of never-ending gun massacres, becomes desensitized to the violence, and becomes a mass killer, that's his fault, not the fault of the retailer.

"I'm not here to argue with that philosophy, but to ask: how is Amazon.com deciding where its responsibility lies? Amazon bans the sale of legal gun parts to adults, but not videos and games depicting mass murder and torture for entertainment to impressionable minds?

"Guns, as I'm sure you know, are often used in self-defense. The NRA says 2 million times a year; the NRA's opponents say the number is closer to 67,000. Either way, that's a lot of people protecting themselves. But who benefits from learning how to strangle an enemy in a toilet while playing Manhunt?

"Mr. Bezos, we do not dispute Amazon's right to sell any of these items, but as staunch defenders of the Second Amendment, we would like to know how Amazon made this decision: Selling legal guns and ammo to adults, no; selling vicious, sadistic torture and murder depictions to adolescents, yes. What is your thinking?"

Bezos thanked Cooper for his point of view, said he would keep it in mind, and otherwise ignored the question. Other shareholders, however, stepped up.

As reported by CNET.com, "But when two other shareholders followed up with questions about violent products, Bezos responded that the company wants to improve its policing of controversial content. But he said it can't come prior to the products, offered by third-party sellers on Amazon.com, hitting the marketplace. 'It needs to be self-service,' he said of the marketplace. 'If it was gated, that would

be throwing the baby out with the bathwater."

Geekwire continues the story:

'We have millions of millions of items,' [Bezos] said. 'It's a difficult technical challenge, it's a difficult organizational challenge to police those items.' He promised that the company will continue working on it with the goal of making its processes 'statistically indistinguishable from perfection.'

Unlike the labor protests faced by the company last year, the questions did not appear to be an organized effort. The third time around, a shareholder asked Bezos for the specific steps to be taken by the company. 'Parents cannot always control what their children are doing, and I think that you hold some responsibility for this.'

Bezos pointed out the parental control features in the Kindle Fire tablets, including the 'Free Time' feature that lets parents control what their kids watch and listen to.

And then he told a personal story about hosting a sleepover for one of his four kids. He collected all the electronic devices before they went up to their rooms. One of the kids asked if he could keep his Kindle. 'E Ink or Fire?' Bezos asked him. It was E Ink, so Bezos let him keep it. 'If he had said Fire I'd have said no,' he said.

He concluded, 'Policing different content...people have a lot of different opinions and what is appropriate content, what is inappropriate. This is going to be an ongoing challenge for us, and we'll do the best we can.'

Bezos did not, however, comment on Amazon.com's policy regarding guns, gun parts and ammunition. Nor did he actually say that Amazon.com would remove any of the most violent games or movies once it reached "statistical perfection."

## Portable EEG Device for Consumers

Product name: MindWave Mobile Brainwave Starter Kit

Manufacturer: NeuroSky, Inc.

Web site: [www.neurosky.com](http://www.neurosky.com) ([www.neurosky.com/Products/MindWave.aspx](http://www.neurosky.com/Products/MindWave.aspx))

Price: \$99.99

Suppose you had a product for visualizing your brain's electrical activity while performing various cognitive tasks such as listening to rap versus classical music, reading an attention-grabbing novel compared with a boring report, or reacting to a computer game's various challenges. Would that be cool? Imagine a product costing less than a smartphone which a child could use to prepare a science project about electroencephalography ([en.wikipedia.org/wiki/Eeg](http://en.wikipedia.org/wiki/Eeg)). How educational! Or what if you could use a product to reduce your stress levels through neurofeedback ([en.wikipedia.org/wiki/Neurofeedback](http://en.wikipedia.org/wiki/Neurofeedback))? Interested? NeuroSky, Inc.'s MindWave Mobile is one such product.

MindWave Mobile (MWM) comes in a colorful cardboard box (Figure 1) measuring roughly 6.5" wide by 4" deep by 8" tall. The box's front has see-through plastic revealing the MWM securely positioned on a molded white plastic insert. The back of the box has a picture showing a woman wearing the device. On the sides you will find illustrated text describing this product's capabilities. Additionally, the bottom has a list of the box's contents (applications installer CD, quick start guide, and the headset) in nine languages. Let's take a look at these contents.

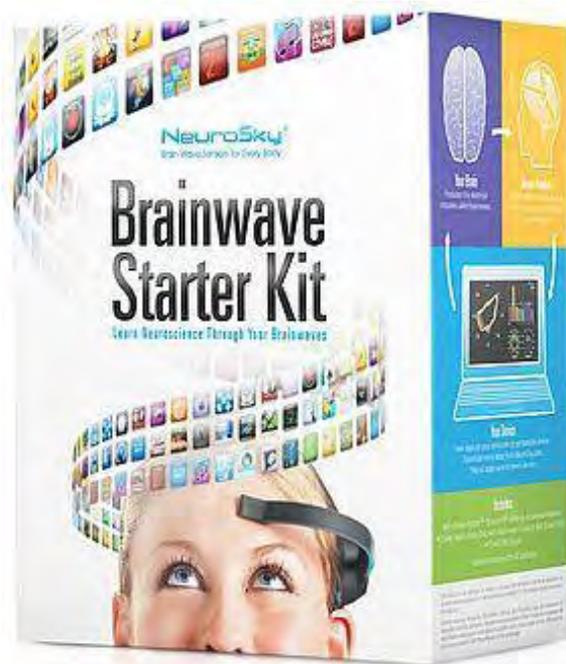


Figure 1. MindWave Mobile comes in an eye-catching package that includes the headset, applications installer CD, and quick start guide.

The applications installer CD is a hybrid that supports Macs and Windows PCs. It contains two partitions—one for computers running Mac OS X 10.5.8 or newer, the other for computers running Windows XP or newer. These partitions install the same four MWM apps (Brainwave Visualizer, MindWave Mobile Tutorial, and SpeedMath; ThinkGearConnector is a background app required by some of NeuroSky's other apps) and the same documentation PDF files (user guides for each of the apps). Another installer on the CD is for Microsoft's .NET framework v. 3.5 which the Windows apps require on PCs that are missing this framework.

The quick start guide included in MWM's box has illustrated text in English only on a folded single sheet of thin cardboard that measures roughly 8" by 13". This guide also is provided in a PDF file within the installed Documentation folder. It is available in eight other languages on NeuroSky's Web site.

Last but not least, MWM's box contains its namesake headset (Figure 2A). This grey plastic headset is remarkably compact and portable, consisting of a thin resizable headband, sensor arm with a metal tip, ear loop, and ear clip (Figure 2B). It weighs in at only a tad over 3 oz (90 gm) and measures roughly 8.8" by 6.1" by 3.6" with the sensor arm up. One user-supplied and replaceable AAA battery is required to energize brainwave detection and Bluetooth 2.1 wireless connectivity for up to 8 hours (your mileage may vary). No contact-enhancing creams are required. When this compact device is compared with the costly, bulky, and/or elaborate equipment used in 20th century EEG labs ([en.wikipedia.org/wiki/Eeg](http://en.wikipedia.org/wiki/Eeg)), NeuroSky's product clearly is an amazing technological accomplishment.



Figure 2A

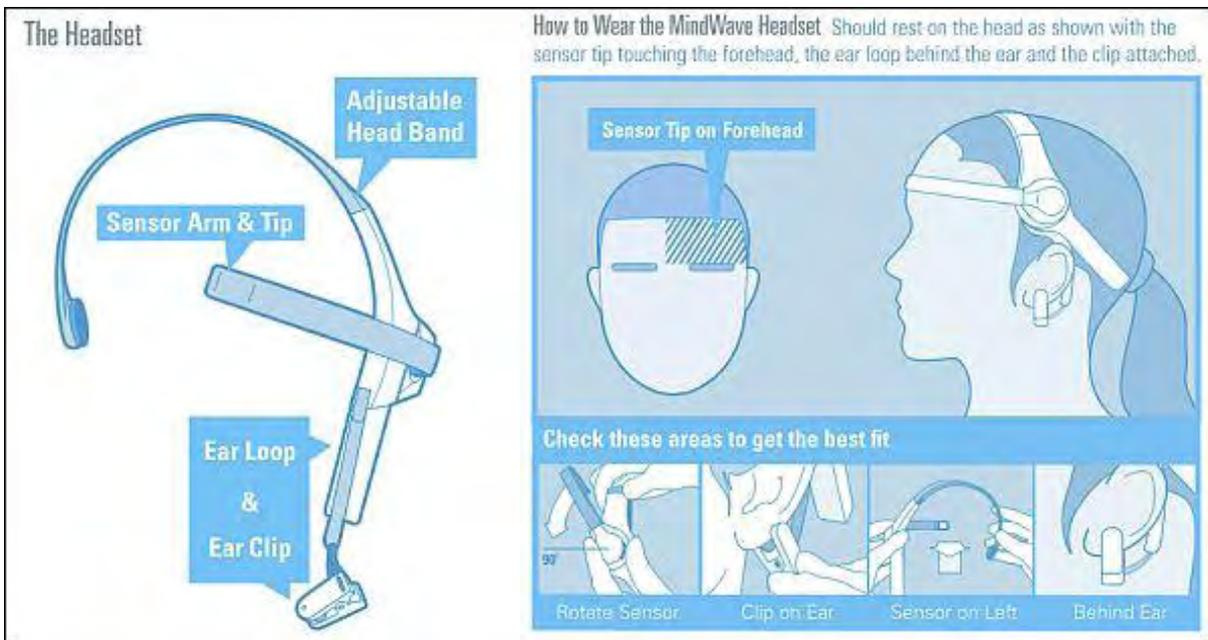


Figure 2B. NeuroSky's MindWave Mobile is a lightweight and portable headset made mostly of sturdy grey plastic powered by one AAA battery. The illustrated user guide shows how to wear this device so that it can detect and wirelessly display your brain's electrical activity on a Mac or Windows PC's, iOS or Android device's screen via accompanying software. Cool...at least in concept.

To get the MWM up and running, install the required AAA battery and then follow the quick start guide's illustrated steps for wearing this product (Figure 2). The first steps are to power on the MWM and then pair it with your Bluetooth-activated computer or mobile (iOS or Android) device. Next, install the aforementioned apps using the accompanying CD or download and install the apps from the appropriate mobile app store. Fire up one of the apps and you're ready to observe your brain's activity while performing cognitive tasks. Cool...at least in concept.

Although the prospect of watching your brain at work while you're engaged in a cognitive task might be enticing, the experience's reality could be very different due to several hiccups encountered during testing for this review. The first hiccup occurred while setting up the MWM. This hiccup definitely was attributable to user error; however, any user in a hurry could make the same mistake. Instead of following the quick start guide's indicated order of steps, my mistake was installing the apps before pairing the device. The guide states that "you will have 2 minutes to pair the headset" after powering on the MWM's Bluetooth. I had doubts about accomplishing that, and the doubts were warranted—pairing required several tries. However, since the apps' installer "expects" the MWM to be paired already, users would do well to follow the guide's steps in the stated order.

The next hiccup occurred while wearing the headset. This device simply was too uncomfortable—even annoyingly painful—to wear for very long. One source of discomfort was the ear clip. This alligator clip has a rounded metal piece on each of its jaws, and the clip's spring is so strong that these pieces can leave a painful impression on the user's ear (Figure 3). Another source of discomfort was the sensor arm's metal tip. It similarly can leave a painful impression on the user's forehead. Another issue related to wearing the headset is goodness of fit. The headset must fit properly on the user's head for the system to detect your brain's activity and relay the signals to the accompanying apps. During testing, the system luckily fit on my head properly with little or no adjustment necessary. Your experience could be very different ([www.wired.com/gadgetlab/2012/05/mindwave-mobile-hands-on/](http://www.wired.com/gadgetlab/2012/05/mindwave-mobile-hands-on/)), however.





Figure 3. MWM's ear clip left a painful impression on the reviewer's ear in less than an hour.

Perhaps the most important hiccup during testing, however, involved the accompanying apps. This is likely the most important hiccup because the apps need to be user friendly and function properly in displaying the user's brainwaves; otherwise, the headset is rendered essentially pointless. During testing, each app had its own hiccup(s) as follows.

The first included app that the quick start guide recommends using is the MindWave Mobile Tutorial. This app displays most of the illustrations and text included in the quick start guide and it determines whether the headset has established a properly functioning Bluetooth connection with the computer or mobile device on which the app is installed (Figure 4). I found this app to be a little confusing because the words at the top of the app's window ("Welcome," "Explain," and "Try") actually are the functional equivalent of a Web browser's left- and right-arrow buttons, and because the app's user interface is unconventional. My guess is that most users will abandon this app after one usage.



Figure 4. NeuroSky's MindWave Mobile Tutorial app helpfully displays illustrated text about how to properly wear the headset and properly establish a functional Bluetooth connection with the computer or mobile device on which the app is running. However, the app is somewhat confusing due to its unconventional user interface (note the app's menubar is missing Edit, Window, and Help menus) and its words ("Welcome," "Explain," and "Try") that function like a Web browser's left- and right-arrow buttons.

The next app included with the MWM to play with is the Brainwave Visualizer (Figure 5). NeuroSky describes this app as follows. "The Brainwave Visualizer is a colorful, interactive application controlled by your brain, that shows you a graphical representation of your brain's activity. The Brainwave Visualizer includes the Brainwave Visualization, Brainwave Power Spectrum Graph, and the eSense Attention and Meditation meters. The on-screen shapes morph and change color depending on your state of mind."



Figure 5. NeuroSky's Brainwave Visualizer app included with the MWM initially is novel and has entertainment value while getting up and running. After initial use, however, its novelty and entertainment value could diminish.

Brainwave Visualizer might be appealing to casual users who enjoy eye candy. Its gauges and multicolored graphic displays can be entertaining as they fluctuate while the user concentrates, meditates, or listens to music played via the app's handy interface to an iTunes playlist (lower left corner in Figure 5). However, my experience with this app put a damper on my enthusiasm for the MWM. Its novelty wore off and entertainment value declined after several trials and the arrow cursor repeatedly disappeared and reappeared as I attempted to position it over the app's icons and buttons rather than displaying continuously. My guess is that casual users who have a similar experience with the Brainwave Visualizer app eventually will abandon it, too. Neuroscientists and/or sleep researchers who need raw EEG data might skip this included app altogether and instead go for the third-party EEG Display for Neurosky Mindwave Mobile (iOS or Android) app ([luciddreamingapp.com/iphone/eeg-display-for-mindwave-mobile/](http://luciddreamingapp.com/iphone/eeg-display-for-mindwave-mobile/)).

The third app included with MWM, SpeedMath, is a game involving concentration. It requires the user to perform basic arithmetic problems and displays the associated EEG activity while solving these problems (Figure 6). My experience in using SpeedMath was similar to Brainwave Visualizer—its novelty and entertainment value wore off after several trials. My guess is that casual users who have a similar experience with this app might eventually abandon it as well.



Figure 6. SpeedMath is a game that displays the user's EEG while solving math problems.

If three of the four included apps end up abandoned and the fourth is just a background program, what's left for the user? NeuroSky has an online store ([store.neurosky.com/collections/applications](http://store.neurosky.com/collections/applications)) containing approximately 100 apps for the MWM (Figure 7). They range in price from free to several dollars to almost \$200. Testing these apps was beyond the scope of this review, but a link to information is provided for each one.

## Applications

The NeuroSky Store curates Apps by third party developers as well as tools and utilities by NeuroSky. The views expressed by third party apps do not necessarily reflect the opinions of NeuroSky.

 <p><b>MindReflector</b> \$99.00 <a href="#">More info &gt;</a></p>	 <p><b>Bullet Dodger Pt. 1: Russian Roulette</b> \$3.15 <a href="#">More info &gt;</a></p>	 <p><b>Bullet Dodger: Russian Roulette</b> Free <a href="#">More info &gt;</a></p>	 <p><b>Chanter</b> \$5.00 <a href="#">More info &gt;</a></p>
 <p><b>Puzzlebox Jigsaw</b> \$99.95 <a href="#">More info &gt;</a></p>	 <p><b>CUSoft Collection</b> \$15.00 <a href="#">More info &gt;</a></p>	 <p><b>Demo: Red Bull Concept</b> Free <a href="#">More info &gt;</a></p>	 <p><b>Vitamin-R</b> \$19.95 <a href="#">More info &gt;</a></p>
 <p><b>Find Number</b> \$5.00 <a href="#">More info &gt;</a></p>	 <p><b>Float One</b> \$2.35 <a href="#">More info &gt;</a></p>	 <p><b>HD Mynd Meditation: Light Evolution</b> \$2.35 <a href="#">More info &gt;</a></p>	 <p><b>Parkour Heroes Pt.1</b> \$3.15 <a href="#">More info &gt;</a></p>
 <p><b>HD Mynd Meditation: Nature</b> \$2.35 <a href="#">More info &gt;</a></p>	 <p><b>Tug of War</b> \$2.85 <a href="#">More info &gt;</a></p>	 <p><b>Home of Attention</b> \$198.00 <a href="#">More info &gt;</a></p>	 <p><b>Imagercise - 30 Credits</b> \$6.00 <a href="#">More info &gt;</a></p>

Figure 7. NeuroSky's Web site hosts a store of additional apps for MWM, some of which are free and other range in price from several dollars to \$200.

In summary, MWM is an intriguing and technologically remarkable device for visualizing, measuring, and recording human brain activity while engaged in cognitive tasks. Its key advantages—portable size, compatibility with multiple computer and mobile platforms, a user replaceable battery, and a sizable store of additional apps—might make this product attractive to neuroscientists and/or sleep researchers. Casual users for whom this product's fit is uncomfortable or for whom the available apps lose their entertainment value could be at risk of losing interest after only a few uses, however.



Review contributed by Barry Fass-Holmes

## Samsung Galaxy S 4 Cell Phone (AT&T)

Manufacturer: Samsung

Model: Galaxy S 4

Carrier: AT&T

Web site: [www.att.com](http://www.att.com) ([www.att.com/shop/wireless/devices/samsung/galaxy-s-4-16gb-black-mist.html#fbid=S5Q2JlqowN-](http://www.att.com/shop/wireless/devices/samsung/galaxy-s-4-16gb-black-mist.html#fbid=S5Q2JlqowN-))

Price: \$199 (16GB), \$249 (32GB), with contract. Current promotion offers \$200 off the price of a Galaxy Tab 2 10.1 tablet with the purchase of any new Samsung Galaxy S 4

The Samsung Galaxy S 4 is a big, bright, gorgeous step forward in the mind-blowing evolution of in-your-hand communications and computing.

I don't know the resolution of the S 4's stunning 5" display is worse, the same, or better—tech-wise—than the iPhone's much-vaunted Retina Display, but it doesn't really matter. I got as close as I could my best reading glasses and still couldn't make out a pixel. For all intents and purposes, resolution is a moot point moving forward—at least with premium devices.



Besides the screen, there's plenty more to like. Samsung gives you a removable battery cover, so take advantage of that and get a spare. You can pick one up on eBay and Amazon for next-to-nothing. Not that you'll need a spare most days. Battery life on this thing is excellent. Gets you right through a busy work day and then some.

A feature called Air View is pretty amazing. Just wave your hand to do things like scroll document, music playlist, and swipe through pics. Hand gestures—for example, hovering—allow results similar to a long tap using standard finger gestures. You can also wave your hand a certain way to accept a call. Air View is close, but not quite there. Sometimes it gets confused trying to guess what you want to do.

The S 4 has a superb camera and some excellent software to go with it (see below). Just one: You can take a picture with both lenses, front and back, at the same time. Lots of unique and interesting uses for that come to mind. Also, the different camera modes and plug-ins are actually useful. Most of the ones on the cameras I've had before the S 4 just sit there, never get used. And you've probably already seen the commercial where you can actually erase people you don't want in a photo with a couple of touches. Pretty incredible.

I don't know how many other phones do this, but the IR remote feature, called WATCHON, is a pretty great option. Heck, you've got the thing with you most of the time anyway, so why not use it to control your TV and all your other stuff? There's a feature called CharterTV that knows what's on what channel. Incredibly useful. If this catches on it could really give Logitech's Harmony remotes a run for their money.

A feature called S Health has real potential. Basically, what you've now got is a personal trainer built right into your smartphone that measures calories burned, the number of steps you take, and lots more. Look for this to become baseline standard technology and software in all smartphones within a couple of years.

How about a con?: Well, the phone feels a bit thin. That's probably because it is thin. If there was ever a device you wanted to protect with

a case, this is it. And make sure you keep those elbows away from that huge screen—at least until a couple of iterations down the road when we get flexible, shatter-proof displays.

It is absolutely amazing what is happening in smartphone technology with no end in sight. And, with phones like the Galaxy S 4, it's clear that Samsung is leading the way.



### **Specs and features (from AT&T):**

*Rear-facing camera: 13MP autofocus with LED flash*

*Zoom: 4x digital*

*Front-facing camera: 2MP*

*Live video capture and playback*

*1080p with dual camera mode, slow motion video capture*

*Dual Camera - Combine photos and video from front and rear cameras into one.*

*Drama Shot - Take series of action shots and put them together in one photo.*

*Sound & Shot - Capture audio with images to help you relive the moment.*

*Beauty Face - Brighten or darken skin tones or hide portrait imperfections.*

*Best Photo - Shoot multiple photos of your subject and choose the best shots.*

*Panorama - Create a single widescreen photo from consecutive shots.*

*Cinema photo - Introduce motion to your photos with Cine Photo mode.*

*Switch to Sports Mode, Night Mode, and more for dramatic shots.*

*Erase mode - Erase unwanted people or objects in pictures with just one touch.*

*Music player: Supported music formats: MP3, OGG, AAC, AAC+, eAAC+, WMA, AMR-NB/WB, FLAC, WAV,*

*MID, AC3, IMY, Vorbis, RA*

*Built-in FM radio*

*Create music playlists*

*Insert pictures, video clips, and sound clips easily (messaging charges apply)*

*Instant Messaging (IM): Google Talk, Ch@tOn*

*Mobile email: POP3/IMAP, Yahoo!, Gmail, Microsoft Exchange ActiveSync*

*Microsoft Direct Push*

*Web browser: Google Chrome and Android browser*

*3G high-speed data and voice. Limited 4G LTE availability in select markets.*

*World phone - Tri-band*

*Bluetooth 4.0 wireless connectivity*

*USB connectivity - transfer data through a USB cable - USB cable included*

*Hands-free speakerphone*

*Voice dialing and voice commands*

*Hearing aid (HAC) rating M3*

*TTY/TTD compatible*

*Enhanced Audio - earSmart Advanced Voice processor improves call clarity & sound quality*

*Battery capacity: 2600mAh*

*Talk time: up to 17 hours*

*Standby time: up to 12.5 days*

*Processor: Qualcomm MDM9215™ + APQ8064T - 1.9GHz Quad-core*

*Memory format: microSD*

*RAM: 2GB*

*Wireless technology: 4G-LTE - Band 4 and 17*

*Wi-Fi connectivity: 802.11 a/b/g/n/ac - 5GHz Wi-Fi*

*Near Field Communication (NFC)*

*Mobile hotspots: up to 10 devices*

*FOTA capable - upgrade Firmware Over The Air*

*Operating system: Android v4.2 (Jelly Bean)*

*Display size: 5.0 inches*

*Resolution (pixels): 1920x1080 HD Super AMOLED (441 ppi) - 16 million colors*

*Touchscreen*

*Smart Scroll - Scroll through a page without using your fingers.*

*Predictive text for fast typing*

*Multitasking - Use voice and data simultaneously.*

*Device Eco-rating: 5 stars. Visit [www.att.com/ecospace](http://www.att.com/ecospace) for additional information.*

*S Translator - Instantly convert voice or text to other supported languages of your choice.*

*S Health - Track workouts, daily calorie intake, and weight levels, and chart your progress.*

**Other features:**

*Multi-window*

*Calendar*

*Alarm clock*

*Call waiting*

*Caller ID*

*Personal organizer*

*Address book*

*Conference calling*

*Call forwarding*

**Preloaded apps from AT&T:**

*AT&T Address Book*

*AT&T Navigator*

*AT&T Family Map*

*myAT&T*

*AT&T Hotspots*

*AT&T U-Verse Live TV*

*YPmobile*

*AT&T Smart Wi-Fi*

*AT&T Messages*

*AT&T Drive Mode*

*AT&T Locker (separate subscriptions may be required)*

---

In addition to being an editor and columnist for *ComputerEdge* and *ComputerScene* Magazines, where he has written hundreds of feature articles and cover stories over the past decade, Charles Carr has also penned well over 1,000 non-tech newspaper and magazine articles and columns for various publications, including two widely-read columns each week for San Diego's *North County Times* newspaper.

Carr has covered such diverse topics as pesticide use in area schools, invasive background checks for county volunteers, asthma awareness, the debate over standards-based grading, potential vulnerabilities in electronic voting machines, and Southern California's devastating 2003 and 2007 wildfires. He has also written many humorous pieces.

Carr has also edited dozens of stories and articles written by others which have appeared in major publications and web sites across the country.

He has been a contributor and technical advisor to *L.A. and San Diego Parent* magazines and receives dozens of requests a year to appear on Southern California television and radio stations to talk about important events in the tech world.

Carr has judged many writing competitions including San Diego Press Club and Time-Warner Communications contests and was sole judge for the national NAPPA Tech Toys awards for five years (which his kids really appreciated). He was recently a judge for the national "Poetry Out Loud" competition.

He has won many writing accolades, including Press Club awards for Best Column Writing, Consumer Writing and Best Arts and Entertainment, and has repeatedly taken top honors in San Diego Songwriter's Guild competitions for his original musical compositions.

Carr will soon publish his first book, *What a World*, a collection of his best writings.

Learn more at [www.charlescarr.com](http://www.charlescarr.com).

[Return to Table of Contents](#)



**Editor's Letters: Tips and Thoughts from Readers**  
"Computer and Internet tips, plus comments on the articles and columns." by ComputerEdge Staff

"Protecting Against Power Surges," "Old Install Disks, XP Professional"

## Protecting Against Power Surges

[Regarding Jack Dunning's May 31 article, "Protecting Against Power Surges":]

Also, I have complained for years about the cheapening of extension cords. It used to be that almost all were 15 amps or more. Now most are 13 amps, which seems so foolish. Even ones that look like "heavy duty" cords with thick colored insulation are often 13 amps. I want a measure of safety, and at least a 15 amp rated cord, if not higher. Also, pay attention to the feel of a cord. If it feels cheap and the plug doesn't feel like it goes properly into its own socket (plugging it in to itself to test), don't buy it. Always look for the UL label and don't buy electronics at dollar-bins or dollar stores. Often they may be counterfeit.

-Dennis, Lakeside, CA

I had my first surge suppressor melt down a few months ago. There was a short power outage of five minutes or less and when the power came back on we heard a pop and shortly after that my wife asked me if the surge suppressor was supposed to be smoking. I lost two surge suppressors that day, but none of my equipment was damaged.

The best surge suppression is via an uninterruptable power supply. As in the case of a laptop, the power goes through transformers to convert AC to DC power which charges the battery which in turn goes through an inverter to re-create the AC power.

Most surge suppressors protect the power from spikes in parallel so in general I think a surge suppressor will absorb some spikes from the "creaky old room fan" plugged into the surge suppressor, especially if you have a <1 nanosecond response time. Voltage will fluctuate, especially if you plug your shop vac into the suppressor.

-Marcus, Alabama

Thank you for a very helpful and instructive article on "Protecting Against Power Surges"

-Ken Guenter, Colorado Springs, Colorado

Jack: I think your article was informative to your readers.

As I investigate insurance claims as a consultant, and service as an expert witness should litigation arise from the claim, I have had numerous investigations that have involved catastrophic failures of surge suppression power strips and similar units.

I would like to add that the surge suppression device failure is often linked to the design of the surge suppression circuit, specifically the design ratings and selection of the MOVs (metal oxide varistor, which is the active circuit element that "diverts" the energy during a voltage "spike"). If the MOV ratings are not properly selected, and the circuit design does not employ adequate thermal-fusing protection, the MOVs will catastrophically fail, often in a fire-causing manner.

As to the voltage clamping rating, "the lower the better" is not necessarily correct. There is a design balance/compromise in selecting the MOV rating and the design of the surge suppression circuit. Additionally, I have found that price does not necessarily indicate quality, or "better" protection. I have had a case where the most costly consumer brand of surge protection devices had surge suppression circuitry that was inferior to the less costly units, available in the big box stores.

All in all, I believe your article took a subject that has volumes of technical papers written about the subject, and summarized it very well for your readers.

I always enjoy reading the *ComputerEdge*.

Best regards,

-Mike, Denver, CO

Timely and informative article. Judging from the description of your fault it may have occurred from the tree taking a HV (20,000V or higher) line and having it fall across the 120/240V secondary line—it has happened before and, as you can imagine, the results are spectacular and disastrous, to say the least.

Anyway, I counted all the processors online at my house, and there are a lot! Microwave, stove, fridge, washing machine, Flat screen TV, cable box, water heater (!) a *lot* besides the computer. Years ago I got an APC UPS/Surge protector for the digital hardware (it came with a \$25k warranty) but the real point I want to pass on is that you need to protect the rest of the house. I recently installed a surge protector on the panel itself. I selected an Eaton unit which was under \$200. It has a 50,000 Amp discharge capability and protects the 120/240 volt incoming line. Easy to install.

I highly recommend this or something similar. It has indicator LEDs to indicate if it is OK or has gone into self sacrifice mode.

Enjoyed the article, enjoy the publication.

-John Freitag

Old Install Disks, XP Professional

[Regarding the May 31 Digital Dave column:]

Try eBay. Many are advertised with no product key, that's what you want. I'd go for one that's a real MS product, not a burned copy from someone. I've used ones from Piratebay, but I'd advise you avoid downloaded versions unless you know for sure it's OK.

-Rich Ernst, San Diego, CA

---

**ComputerEdge** always wants to hear from you, our readers. If you have specific comments about one of our articles, please click the "Tell us what you think about this article!" link at the top or bottom of the specific article/column at ComputerEdge.com ([webserver.computoredge.com/online.mvc?src=ebook](http://webserver.computoredge.com/online.mvc?src=ebook)). Your comments will be attached to the column and may appear at a later time in the "Editor's Letters" section. If you want to submit a short "ComputerQuick Review", or yell at us, please e-mail us at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com). If you would like to review our recent e-books, please visit ComputerEdge E-Books ([www.computoredgebooks.com](http://www.computoredgebooks.com)).

---

---

Send mail to [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com) with questions about editorial content.

Send mail to [cwebmaster@computoredge.com](mailto:cwebmaster@computoredge.com) with questions or comments about this Web site.

Copyright © 1997-2013 The Byte Buyer, Inc.

ComputerEdge Magazine, P.O. Box 83086, San Diego, CA 92138. (858) 573-0315