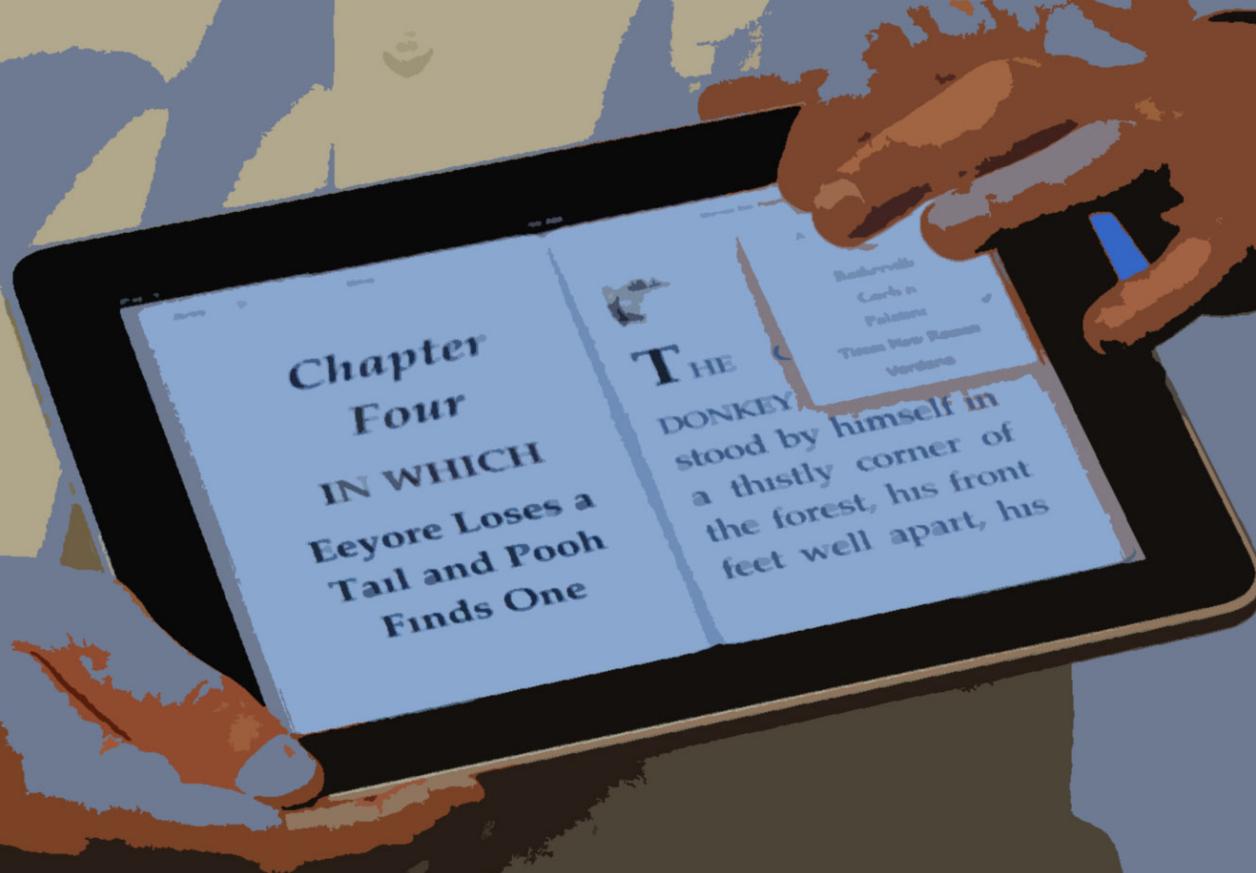


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# Washington Apple Pi Journal

May - June 2010  
Volume 32, No. 3





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### Writers' submissions:

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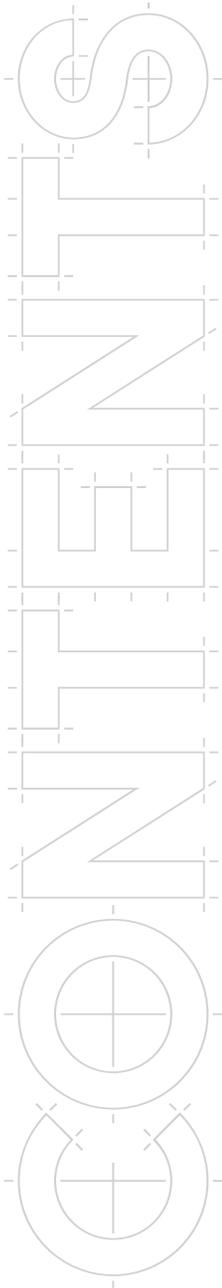
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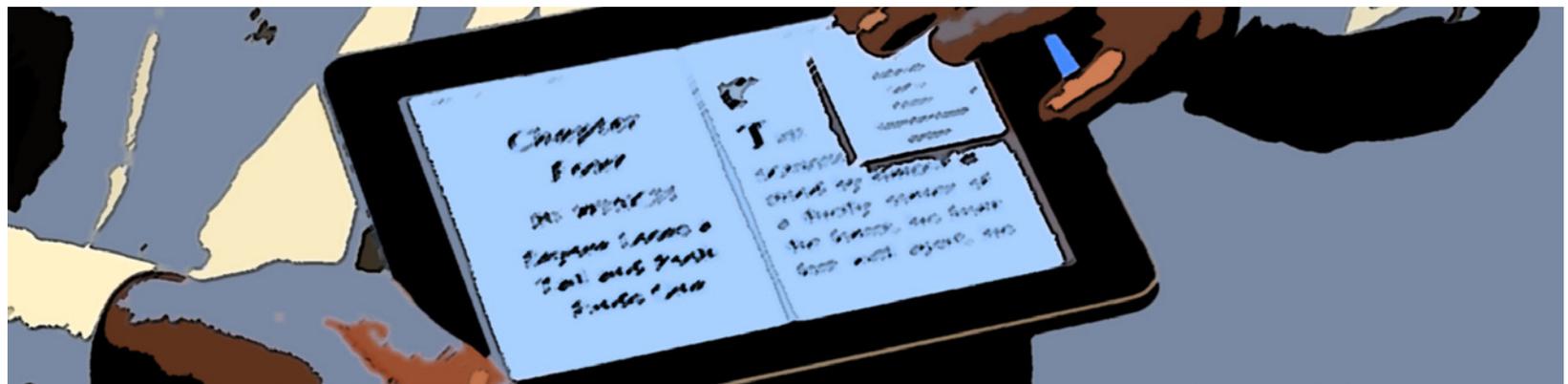
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## Editor's Column

By Bob Jarecke

**W**elcome to another issue of the *Journal*! Unlike the PBS show with the same name, we are not ceasing to produce our *Journal*! (Just had to get in a little jab at Bill Moyers and company.) Rather, we are adjusting and evolving to give you a more pleasurable and informative reading experience. We hope we are on target; let us know ([Feedback](#)).

As you can guess from the Photoshopped image on our cover, we will be offering more on the latest gadget sensation, the iPad. Several members have already helped Apple's bottom line and procured one or more of these trendy new devices. Have you? If you are on the fence, this *Journal* may be what you need to help you decide, as the iPad is addressed in several places. And don't overlook the last page, featuring topics for upcoming monthly meetings. You guessed it: May's meeting will feature end users talking about their iPad experiences!

As for the other content in this *Journal*, several members have come forth with pieces that are sure to enlighten and even entertain. However, we could always use some fresh material from authors besides the usual suspects. Contact me if you have an idea or a draft, and the Publications Committee will help you turn your article into a Pulitzer Prize winning composition. Promise.

Finally, I would like to remind the readership that the Publications Committee is an all-volunteer group that, in my estimation, does superb work. We have added a couple of new editors recently, and they are learning how seriously the rest of us view the task of producing this (IMHO) exceptional read. Care to join in the fun? Your talents will definitely be put to the test, and the results of your efforts will make you proud to be a part of this great bunch of Apple and Mac enthusiasts. Email me ([editor@wap.org](mailto:editor@wap.org)) to hold a reserved position at the front of what could be a long line of volunteers.

Enough already. Enjoy your *Journal*!





## Letters to the Editor:

# Adobe Reader – and other things that go bump in the night

Dear Editor,

At the last General Meeting [March 2010] there was a question about Adobe *Reader*. It was stated that there is a glaring security flaw in *Reader* that can lead to arbitrary code execution (that's bad). Then, as an additional stake in the heart, Adobe *Reader* has JavaScript enabled by default. These statements are true.

Well, the JavaScript issue is still overkill, but it can be disabled in the Preferences.

[Adobe Reader < Preferences < JavaScript < [ ] enable javascript ]

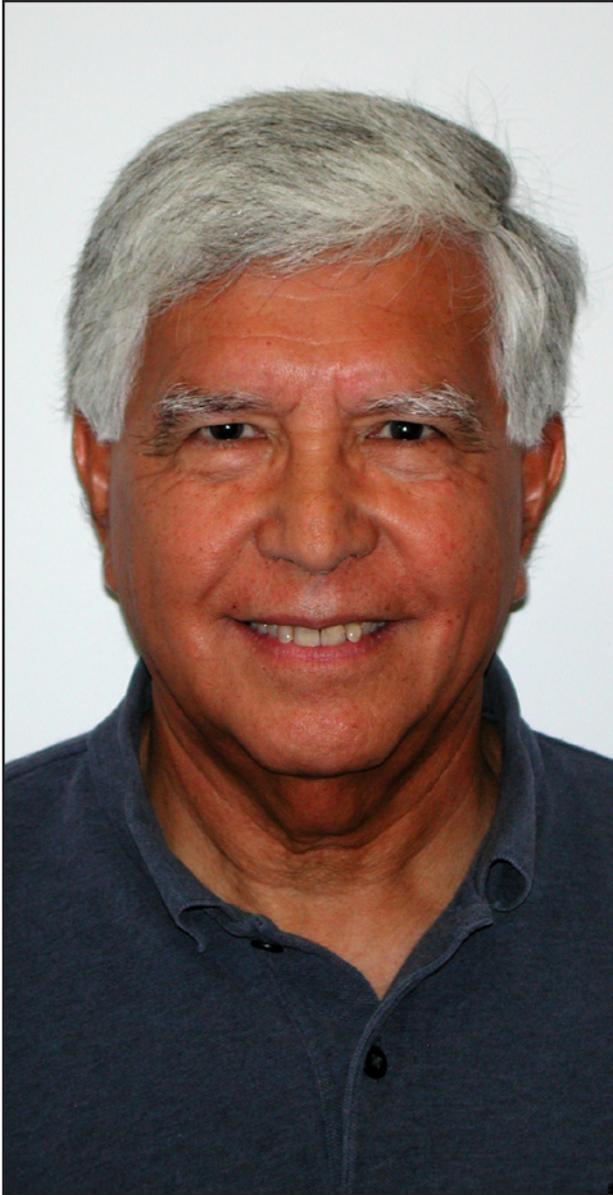
Just a note to clear some things up. Anything, no matter what you use, can be dangerous. Using a pair of metal scissors to cut a plugged-in lamp cord isn't smart, but people do the equivalent in computing everyday.

Going with the Adobe *Reader* example, if you download a PDF from the Pi site, not only is it fine to open in any application, it views better in *Reader*. There is no inherent security risk, because the content has been created by a known and trusted source. If Richard Spammalot sends you a PDF, do not open it. If a friend sends you a PDF that exclaims there are racy pictures of Anna Kournikova, do not open it.

The driving point here is, do what you can to protect yourself. Practice safe computing. Keep reading the *Journal*!

**Bo Huttinger**

*Editor's Comment: The Journal Editors are aware of the Adobe Reader issue and wholeheartedly endorse a conservative approach when using Reader for viewing questionable content. Even though using Apple Preview may seem like a safer approach, it too has security issues. The bottom line is that you can be assured the Journal is safe to open in any PDF viewer application, but the experience is less than optimum if using something other than Adobe Reader or Adobe Acrobat.*



## From the President: Take an Action

*By Jay Castillo*

### Election of Board Members

The month of May is officially election season for the vacancies on the Pi Board. To vote, proceed to the (new) Washington Apple Pi membership portal Web page (<<http://connect.wap.org>>), and after logging in, you will see on the left sidebar a menu. Click on "Election." You will then be presented with the photos of the candidates and their nomination statements.

There are four candidates this year, running for five open seats: Bing Inocencio, Robert (Bo) Huttinger, Diana King, and Dick Nugent. I believe they are well qualified and highly motivated. Please read their personal statements and check the boxes of any candidates for whom you would like to vote. The Pi polls will be open through the end of May. Candidates receiving the votes of at least three percent of the membership will be deemed to have won. We currently have just over 700 members.

The Election Committee will certify the results and contact the winners. Results will be posted on the Pi TCS Forums and in an Announce list email message. The results will be presented to the Board for approval at its June meeting. Please vote!

### It's Always about Volunteers

I'm pleased with the willingness of members to step forward and volunteer their skills, time, and energy. We had a new volunteer at a recent Clubhouse Saturday, who wanted to share his Apple expertise with anyone who needed it. As it turned out, I learned a couple of neat tricks as he joined me in assisting one of our members. As another example, Kitty, our coffee Sherpa for the monthly meetings, was unable to support our April meeting. Mary D. filled in for her and all was well; we had good coffee, donut holes, and excellent fudge!

But we still have a critical need for a Treasurer. The job isn't painful, support is available, and you will obtain much merit in your present incarnation. The one gotcha is you will have to join the Board of Directors, which just so happens to have one vacant position to accommodate such a volunteer.

So give us a hand!

# Election 2010: Meet the Candidates!

## Introduction

The Pi members listed on this page are nominees for four of the five open positions on the Board of Directors of the Washington Apple Pi. Three of these candidates have been with the Pi for many years, and want to give something back. The fourth candidate is a newer member who is very active in Pi activities and on the Management Committee, and he would like to participate in more of the senior level decision-making. In all cases, their enthusiasm and volunteer spirit are greatly appreciated.

## And the nominees are:



**Bo Huttinger**

*"I believe that user groups are a relevant force in today's society, as all people need assistance, even on the simplest of devices. As our Apple-related products grow increasingly difficult to use, I feel we as a group have a role to fulfill. I want to help the Pi do its part to help with this mission."*



**Bing Inocencio**

*"First, let me say that I'd like to serve because I owe it to WAP, which has come to my rescue many times and helped me with all kinds of technical problems."*



**Diana King**

*"With my background in teaching English, I volunteered recently to help with editing the Journal. But serving on the Board of Directors would give me another way to contribute to an organization that has been an important resource for me for more than a decade."*



**Dick Nugent**

*"I have been a member of Washington Apple Pi for a number of years and feel it's time I contributed a little more."*

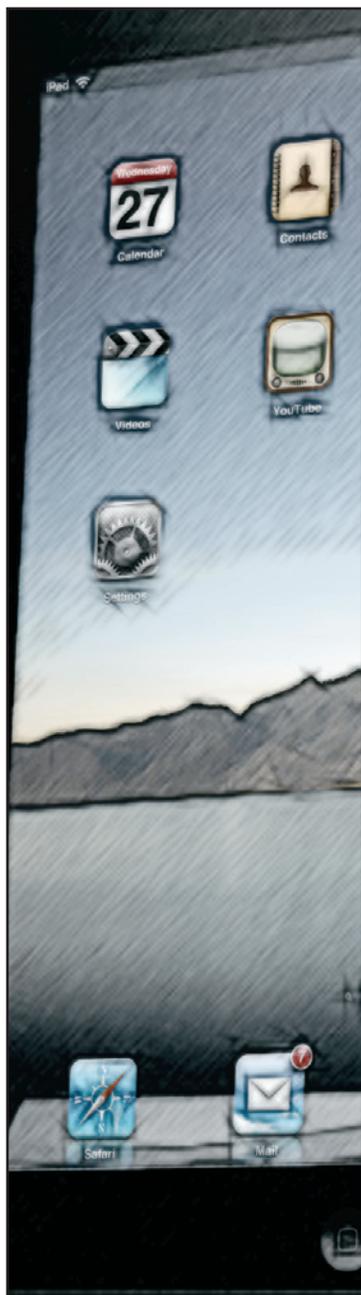
## Voting Instructions

The voting process is easy and fast, and we have the means to provide secure electronic balloting. Click on the link below and a Web page will open asking for your membership account name and password. Once these are filled in, click on Sign In and you will be whisked to the Election page to vote. The instructions there are simple and short. Please, support the volunteer efforts of these gracious members and vote them onto the Board.

<https://connect.wap.org/election/>

# iPad: Not a Netbook; It's Better

© 2010 Larry Biggs and Lawrence I. Charters



**A** great many years ago, when we were younger, Larry Biggs and I worked for the largest networking company in Southern California. Now we are on opposite coasts, separated by a continent, but still keep in touch electronically. For several months now, we've been episodically discussing the iPad, what it might or might not do, and sharing odd bits of obtuse geekiness.

As it currently stands, Larry is winning on the geekiness front. He was given an iPad shortly after it was introduced, and mentioned to a third party that it was "pretty cool." The third party replied that Larry should not "try to turn it into a laptop, try to use it as something new (I guess between an iPod touch and MacBook)."

## Larry responded:

*Agreed, it's not a laptop, but the weird thing is, it's more than one.*

*Here are my thoughts: I have a 2006 MacBook Pro Core 2 Duo with 3GB of RAM and it can do anything I need except it has limited battery life and it's heavy to haul around, but a great machine.*

*I have a "hackintosh" Lenovo S10 (Intel Atom-powered) netbook running Mac OS X 10.6.3 with a 9-cell battery (8 hour battery life although I've never tested it) and an SSD [flash RAM-based solid state drive] to help speed it up. The thing rocks, runs every major application I need (it can even run VMWare Fusion), hooks up to an external monitor and so on. But it has a tiny screen if I use it sans monitor. If I were to go on a long trip I'd take the netbook for the size and portability and battery life. Downside is it can't play videos as well as the MacBook Pro and the little keyboard is no better than OK for typing (though*

*with practice I can scoot along pretty good on it). It is the main machine I use for backing up and syncing the iPad.*

## Enter the iPad...

*It's probably closest to the netbook in terms of screen size and so on but with one big difference. The signature iPad pinch-to-zoom the netbook can't do, so the screen size suddenly doesn't matter because something interesting can be zoomed for use.*

*Add to that the external Bluetooth keyboard and you can type as fast as you need.*

*Battery life is a confirmed 10 hours. The iPad fits in my go bag like a book, and all the killer apps bring it head and shoulders above both the netbook and the MacBook Pro. It's really all about the app at this point; the hardware is the platform and the app makes it whatever it needs to be.*

*Lastly, my iPad is Wi-Fi only, however my cell phone has Internet connectivity and I can run software on it that turns it into a "MiFi" [compact wireless router that connects to the cellular data network] and can share via ad hoc Wi-Fi networking to the iPad, making the iPad a go anywhere device.*

**[Editor's note: Regrettably, this software will not work on your iPhone; it requires a Windows-based phone.]**

*It really is a big deal in my mind; suddenly the iPad is the main machine with the netbook or MacBook being the secondary machine or only used for heavy lifting (HandBrake, etc).*

*Anyway, those are my thoughts after using the iPad since Saturday morning. I'll keep you posted!*

**>Sent from my iPad**



Larry's iPad, wrapped in Apple's protective case (which doubles as an easel), resting on a Griffin Elevator stand. An Apple Bluetooth keyboard speeds typing, and an HTC cell phone, running special software, serves as a wireless Internet router.

And of course there are the obvious strengths of the iPad: the gloriously big, bright screen, the intuitive finger-centric interface, the ability to read books, watch movies, listen to music, and play games without compromise, and the potential to do new things you've never done before. The iPad is an update of Descartes' famous observation, "Cogito ergo sum," ("I think, therefore I am"), morphed to "The iPad is, so this app can do."

Why would the iPad's mere existence spark a revolution? Consider Star Walk, a \$4.99 application for the iPad. Install it, walk outside, lift up the iPad toward the sky, and it draws a map of that portion of the sky and annotates it for you. Can't tell the Big Dipper from Orion? Now you can, using the GPS capabilities of the iPad, the large screen, and a reasonably clear sky. Take a look at the video, listed in References at the end of this article; this app needed the iPad to be invented.

Larry has collected some other bits and pieces to round out his iPad experience, especially when traveling:

Headphones: Etymotic ER4P

External microphone: Griffin SmartTalk (not strictly needed, but he had one)

Portable charger: Energizer XP18000

Cleaning: blue microfiber cloth

Tool set: Leatherman Charge TTi (not strictly required by most people)

Flashlight: Gerber LX 3.0 (not strictly required)

Travel bag: Fossil (many styles)

The Fossil bag can carry both the iPad and all of this stuff, plus the Lenovo "hackintosh," and is small enough to serve as carry-on luggage on an airliner (minus the Leatherman; TSA classifies it as a potential weapon).

For those of you who may have heard that the iPad is not "geeky enough" to satisfy the technical literati: ha! Yes, it is a user-friendly, portable video player or music player or game player or Web browser or E-mail reader or book reader or photo album.

But it doesn't have to be that easy. Soon Dr. Horrible will be able to use the iPad to try and take over the world again (upgrading from an iPod touch), prankster hackers will use iPads to break into Fox News and make it sound ridiculous (well, more ridiculous), and crazed hobbyists will use the \$500 devices to control \$20 toy robots.

The iPad is, so this app can do.

See page 10 for  
more resources  
on the iPad.

## Resources

Apple iPad,  
<http://www.apple.com/ipad/>

Dr. Horrible,  
<http://doctorhorrible.net/>

Energizer XP1800 external battery pack,  
<http://www.energizerpowerpacks.com/us/products/xp18000/>

Etymotic ER4P headphones,  
<http://www.etymotic.com/ephp/er4.aspx>

Fossil travel bag (many options),  
<http://www.fossil.com/>

Gerber LX 3.0 flashlight,  
<http://www.gerbergear.com/index.php/product/id/15>

Griffin Elevator MacBook stand,  
<http://www.griffintechology.com/products/elevator>

Griffin SmarTalk inline microphone,  
<http://www.griffintechology.com/products/smarttalk>

Leatherman Charge TTI multitool,  
<http://www.leathermanstore.com/830682.html>

Lenovo S10 netbook,  
<http://www.lenovo.com/us/en/>

Lenovo cookbook for making a “hackintosh,”  
<http://s10lenovo.com/viewtopic.php?f=33&t=3280>

Star Walk mobile sky map,  
<http://vitotechnology.com/star-walk.html>

Star Walk video,  
<http://www.youtube.com/watch?v=ujLjXEQ3wE4>

WMWiFiRouter (cell phone-based wireless Internet access point)  
<http://www.wmwifirouter.com/>



# Images from the iPad Introduction Day



It is almost 12:30 on the day of the iPad's introduction, and this line, outside of the Apple Store in Columbia, MD, is for those who've ordered an iPad and are waiting to pick it up. Earlier in the day, the line extended hundreds of feet down the inside of the Mall, prompting some shops to ply the crowd with samples. Williams-Sonoma, for example, gave out samples of candy.

Photo by Lawrence I. Charters

Inside the Apple Store in Columbia, MD, customers were everywhere, even on the counters. The rabbit ears, presumably, are not required for Wi-Fi reception.

Photo by Lawrence I. Charters



## Survey Sez: Pi iPad Survey

One hundred and seventy-two people responded to the call to take the iPad survey. Eighteen folks liked it so much they took it a second time! Two outsiders participated as well. We decided to count all the responses in our tallies.

We ran the seven-question poll before the iPad was available, because we wanted to get an early idea of how interested our members were in the device, and how much meeting time we should plan on devoting to it. So what did the respondents say? Check out the results below.

### The Numerical Results

#### Question 1:

*Are you seriously considering getting an iPad?*

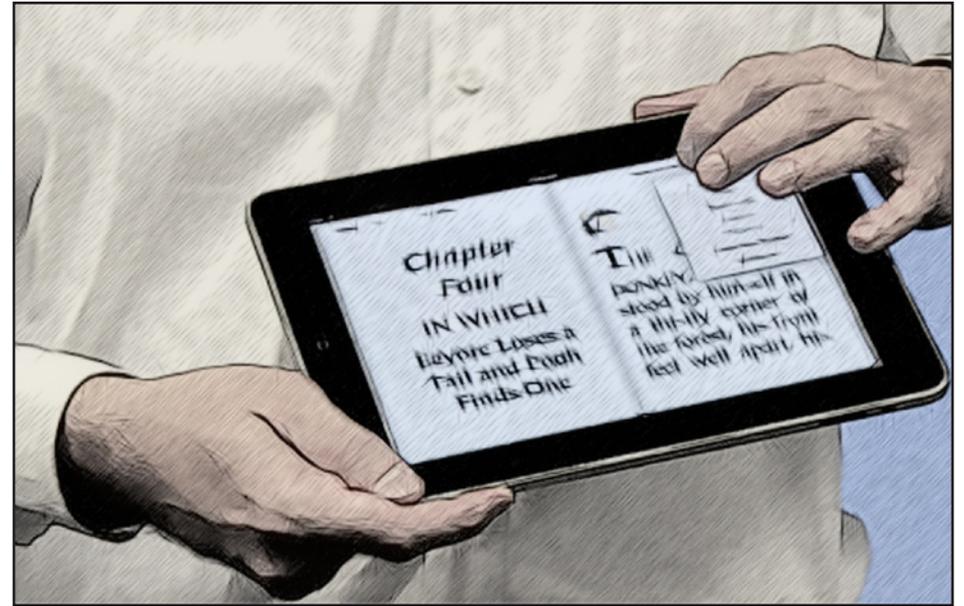
Yes	72 (42%)
No	59 (34%)
At present, not sure	41 (24%)

To start with, we wanted to gauge how committed our survey takers were. Forty-two percent answered affirmatively, while a shade over one-third were definitely not interested. That left just under a quarter of the respondents in that nebulous “undecided” category.

#### Question 2:

*If you were to get an iPad, which model would you purchase?*

16GB Wi-Fi only (\$499)	47 (27%)
32GB Wi-Fi only (\$599)	33 (19%)
64GB Wi-Fi only (\$699)	19 (11%)
Total Wi-Fi only	(57%)
16GB Wi-Fi and 3G (\$629)	15 (09%)
32GB Wi-Fi and 3G (\$729)	20 (12%)
64GB Wi-Fi and 3G (\$829)	38 (22%)
Total Wi-Fi and 3G	(43%)



Question 2 was aimed at determining which model of iPad was most appealing. We structured it as a hypothetical question so that even those who had answered “No” to Question 1 could respond.

The results suggest that cost might have been the biggest factor, since the largest number of respondents opted for the cheapest model. However, the second-largest group went whole hog; those respondents would buy the most expensive model. Go figure!

It is also interesting to see that a majority (57%) went for the Wi-Fi only models. Perhaps the fact that these models were going to be released first played a role in that decision. Or, again, it could have been all about the cost. I can’t help but wonder if the voting would be the same today with both versions available but with initial reports of the iPad dropping Wi-Fi connections with alarming regularity.

**Question 3:**

*Of the iPad features listed below, which of these MOST appeals to you?*

- a. Book page-size reading area 72 (42%)
- b. Support for color 15 (09%)
- c. Support for iPhone interface 18 (10%)
- d. Battery life 4 (02%)
- e. Apple quality 63 (37%)

The third question tried to nail down the most important feature of the iPad. We listed what were reported to be some of the big selling points, and asked respondents to pick the most important one. By a wide margin, screen size and Apple quality carried the day.

**Question 4:**

*For which of the following purposes would you use an iPad?*

- a. Reading eBooks 119 (70% of respondents)
- b. Surfing the Web 133 (77% of respondents)
- c. Getting and Sending Mail 122 (71% of respondents)
- d. Videos 96 (56% of respondents)
- e. Using iWork Applications 70 (41% of respondents)
- f. Viewing and Sharing Photos 87 (51% of respondents)
- g. Other 42 (24% of respondents)

Question 4 attempted to learn what features the respondents expect to use. The question allowed people to select more than one answer, and people did; we had 669 responses from our 172 survey participants. This makes it difficult to assess the results in a meaningful way. It does look, though, like people expect to read books, surf the Web and access their email more than they expect to use the iPad for real work. What a surprise!



**Question 5:**

*Do you own either an iPhone or an iPod touch?*

- Yes (one or both) 107 (62%)
- No (neither) 65 (38%)

The fifth question was an attempt to learn something about the mobile computing tendencies of the respondents, in part to assess the pool of possible mobile computing SIG members (see Question 7) and in part to see whether folks who already had an iPhone or iPod touch would be inclined to get the iPad too. Comparing the response here and the response to Question 1, it looks like three out of four of them are not going to settle for the smaller screens.

**Question 6:**

*Do you think that Apple has another hit on its hands with the iPad?*

- Yes 115 (67%)
- No (neither) 5 (03%)
- The jury is still out 52 (30%)

Question 6 was a fun question that called for the respondent to exercise fortune-telling skills. Two-thirds of the group felt that Apple had hit another home run like the iPod and iPhone. Or maybe they were looking at it from a historical perspective and betting on Apple's record.

**Question 7:**

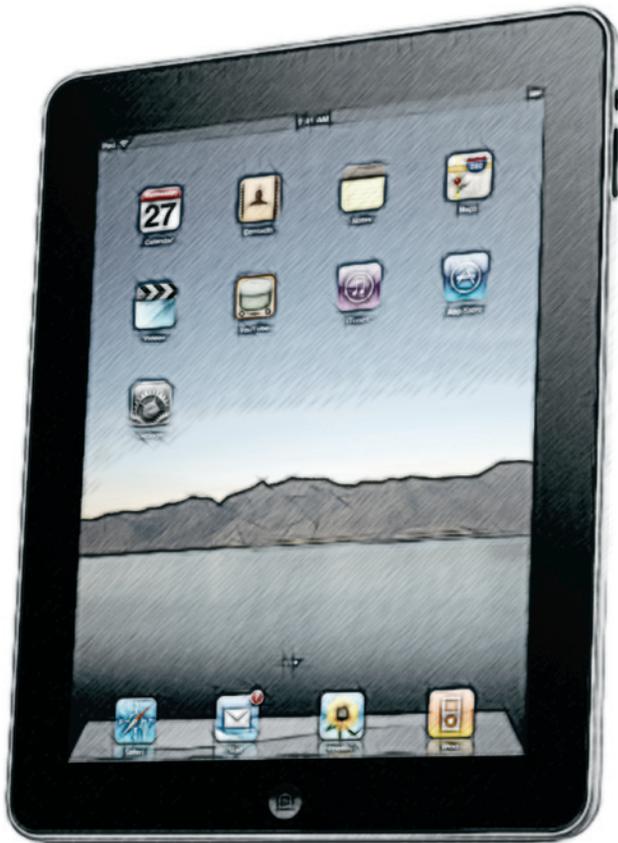
*Would you be interested in joining a Washington Apple Pi Special Interest Group for mobile devices?*

- Yes 71 (41%)
- No 101 (59%)

This last question was only partially related to the iPad; it was principally geared toward developing a Mobile Devices Special Interest Group. With the number of yes votes, if we had just half of these folks show up for a meeting, we would have to break out the extra chairs!

While we can't promise that a SIG will be formally launched, efforts will be made to recruit a SIG leader (see Volunteer Opportunities page). As for a gathering place, the Pi Clubhouse space is readily available.

Another option would be for us to provide time and space after our monthly meetings for interested mobile users to meet, as we have done in the past. These more informal Meet-Up sessions can prove to be educational and entertaining. Again, it would depend on volunteer leadership.



## The Comments

The survey respondents had lots to say, and with the blank comments field in front of them, we got an earful. While the comments make interesting reading, there were so many, and they were so diverse, that if I tried to summarize them all it would put the page count of this article into double-digits. I can't do that to you. Nonetheless, here are some generalizations about the comments, and a few choice quotes.

Many folks felt it was too soon to test the iPad waters. Some plan to wait for a later version, hoping that it will have the kinks worked out and offer enhanced features. Specifically, several people are not interested in models without camera and phone capabilities. We'll see if they can grit their teeth for that long.

There was more than one comment expressing a wish to learn more about the iPad, its feature set and the applications, through the Pi. The Pi's management is wide open to providing informative presentations on mobile computing as well as tutorial assistance. The May monthly meeting is a start at the former, while our Clubhouse Saturdays offer a venue to address the latter. And as stated previously, should a volunteer leader emerge, a SIG or less formal group dedicated to mobile computing could provide more opportunities to expand one's knowledge about the iPad.

Finally, some choice comments offered to make you think and also smile:

*Having seen the uses my son (40) and Grandson (13) have put to their iPod touches (birthdays gifts), I think Apple has just started to uncover the true potential of a mobile powerful touch screen OS. Moore's Law is going to provide the basic power and Apple's developers the inspiration.*

*This is a new kind of device, not a computer, not a phone. a new beast.*

*Still learning the iTouch [iPod touch]. Not ready for another device.*

So there you have it: another Pi survey and another set of inputs to help us build a more user-friendly Pi. Stay tuned for developments that will help you better understand and use your Mac or Apple mobile computing device.



# Time Capsule Failures: When They Happen and What to Do

© 2010 By Doug McLean

[The below article is reprinted from an article on the TidBITS Web site, with permission from TidBITS Publishing Inc <<http://db.tidbits.com/>>. The permanent URL for the article is: <<http://db.tidbits.com/article/11091>>.]

All hardware fails at some point, but we generally withhold coverage until a pattern appears, until the problem appears to affect relatively large numbers of people, or when the manufacturer ignores seemingly obvious proof.



Editors at TidBITS have heard anecdotally for many months that users were experiencing failures with Apple's Time Capsule base station/backup appliance units that were relatively new, but outside the warranty period. But with an unknown number sold - it may be hundreds of thousands or even millions, for all we know - it was impossible to determine whether these failures were commonplace or statistical outliers.

TidBITS reader Dean Lombard recently brought this issue back to our attention. He described his experiences with a defective Time Capsule, which died after a short period of use, and pointed to several spots on the Web where other Time Capsule owners were commiserating over their busted backup devices.

The reason we're writing about this now? In late 2009, Apple quietly started acknowledging the problem and replacing certain affected models. And those whose Time Capsules appear to be working properly can do a few things to protect against failure and keep the devices functional.

## Symptoms and Suspicions

Widespread failure apparently began in September 2008, roughly 18 months after the first units were sold. The primary symptom was a failure of the Time Capsule to power up. Users from all over the world - the United States, the UK, China, Australia, and elsewhere - have reported untimely Time Capsule deaths. The [average lifespan](#)<sup>1</sup> of Time Capsules

registered on a site tracking this problem is 19 months and 20 days; hardly acceptable for what is designed to be a *backup* device, and well outside the one-year warranty.

Heat is the most likely culprit for these premature deaths. Or, rather, poor heat management leading to overheated capacitors. User Ray Haverfield, having looked closely at the issue and modified Time Capsule hardware to resolve it, posits on [his site](#)<sup>2</sup>, "The power supply is well made with good quality components, capacitors etc. [The Time Capsule] is simply dying due to elevated temperatures, as the lifespan of components is greatly reduced running at such a high temperature. Lifespan of electrolytic capacitors is particularly sensitive to temperature."

Haverfield points out that while these devices do have a built-in fan, the fan largely circulates hot air within the casing. He also says that the rubber base of the Time Capsule likely acts as an insulator, worsening the problem.

Since it appears the problem lies mainly with the power supply, as opposed to the hard disk, there is a good chance that information trapped on a dead Time Capsule is retrievable.

## The Solution

The efforts on the part of the Apple user community to organize and publicize the problem have been particularly noteworthy. After being told by Apple

that his Time Capsule was past warranty and he was out of luck, user Pim van Bochoven decided to forgo complaining in the usual Apple Discussion Forums and began [The Time Capsule Memorial Register](#)<sup>3</sup> in October 2009.

On that site, he collected, tracked, and analyzed data from 2,500 Time Capsule owners whose devices had died in a similar manner and time frame, creating a persuasive argument that this was a widespread design flaw that Apple should rectify. (Again, we don't know what percentage of units sold that 2,500 number represents, but it's a large number in itself, and must be a small fraction of all Time Capsule failures given that only a portion of those whose device died would register its loss.)

In November 2009, Apple posted an internal Knowledge Base article instructing employees to begin checking serial numbers of any dead Time Capsules brought to them by customers; Time Capsules falling into a specific (but as yet undisclosed) serial number range would qualify for a replacement. On 15 February 2010, The Time Capsule Memorial Register site reached 2,500 registered failures and closed, having accomplished its mission of gaining attention for the problem and generating an official response from Apple.

#### Tactics for Replacement and Recovery

If you own a dead Time Capsule, you have a few options. First, you can try to have your Time Capsule replaced at no cost by Apple. [According to the Time Capsule Memorial Register](#)<sup>4</sup>, Apple will replace your Time Capsule for free if you have a 3-year AppleCare contract on any device; have purchased a computer within the last year (which comes with a

1-year warranty that can be cross-applied to the Time Capsule); or have a Time Capsule whose serial number falls within a specific range.

To pursue this path, call [Apple Support](#)<sup>5</sup> or visit your local area Apple Store or [Apple Authorized Dealer](#)<sup>6</sup>. Note that if you decide to have your Time Capsule replaced, you will have to send Apple your dead Time Capsule, and its hard disk will be erased. While data recovery is thus not a possibility, your data is also unlikely to end up in anyone else's hands as Apple has assured users it does indeed erase all data. Attempting to rescue your data by removing the hard disk, copying the data off, and then reinstalling it voids your basic warranty, and could be grounds for Apple to refuse your replacement. So if data retrieval is a paramount concern, this might not be the best option for you.

For those looking to salvage data, a second option is to find someone to repair the blown capacitors without replacing or removing the hard disk. If you have Ray Haverfield do the job (most appropriate for users in Australia), expect to pay about \$100 plus shipping for a power supply repair and fan modification (to better vent the unit). \$130 gets your Time Capsule fitted with an external power supply, and the fan modification. Ray also graciously lists some [other repair people](#)<sup>7</sup> elsewhere in the world, should you want to shop around. Remember though, there are no guarantees with these repairs; these people are not Apple employees and their work will certainly void your Apple warranty.

A third option, should you want to salvage your Time Capsule's data, have some experience with electronic repairs, and not feel comfortable entrusting your device and its data to a stranger, is to repair your

device yourself. Haverfield's Web site offers several sets of instructions for performing a power supply repair (see [this one](#)<sup>8</sup>, [this one](#)<sup>9</sup>, and [this one](#).)

If you do decide either to have a third party repair your Time Capsule, or to perform a self repair, take a moment to [let Apple know](#)<sup>10</sup> you've had issues with your Time Capsule.

#### Final Notes

If your Time Capsule is still working well, consider backing up your data using the Archive function in the Time Capsule view of AirPort Utility. You need a second drive with at least as much storage as has been consumed with backups on the internal drive. Attach the drive to the Time Capsule via USB, then launch Applications > Utilities > AirPort Utility. Select the Time Capsule unit in the list at left, and click Manual Setup at the bottom. In the Disks view, select the drive



in the list at left, then click Archive. (You can read more about this process and other Time Capsule and AirPort Extreme hard drive configuration issues in Glenn Fleishman's "[Take Control of Your 802.11n AirPort Network](#).") Backups are especially important if you're storing data other than Time Machine backups on the Time Capsule.

You should also examine your Time Capsule location and venting. You might elevate it off the surface it's on, or position it on its side. The Time Capsule's antennas are designed to work with its broad side flat on a surface, so tipping it may adversely affect Wi-Fi coverage. But modern hard drives can work in horizontal and vertical positions. (Some users on forums have reported noise when the Time Capsule is long side vertical, but that may be related to the fan.)

[Replacing the drive](#)<sup>11</sup> with a "green" drive that produces less heat could also help, but may not be worth doing unless you have other reasons to replace the drive. Reports indicate that Apple may have addressed the heat problem in newer Time Capsule units by using drives that run cooler. And of course, adding something like [CrashPlan](#)<sup>12</sup> to your backup strategy would give you an entirely independent backup that could also be offsite, if you locate your backup drive at a friend's house.

Kudos to Pim van Bochoven for the creation of The Time Capsule Memorial Register site, where users were able to transform their individual complaints into a larger, more organized, and more powerful force that encouraged Apple to take action. While it's unfortunate that getting Apple to address a widespread problem required such arm-twisting, it's great to see the user community band together and create momentum for their cause.



## Resources

1. <http://timecapsuledead.org/stats.html>
2. <http://sites.google.com/site/lapastenague/a-deconstruction-of-routers-and-modems>
3. <http://timecapsuledead.org/>
4. [http://timecapsuledead.org/now\\_what.html](http://timecapsuledead.org/now_what.html)
5. [http://www.apple.com/support/contact/phone\\_contacts.html](http://www.apple.com/support/contact/phone_contacts.html)
6. <http://www.apple.com/buy/locator/service/>
7. <http://sites.google.com/site/lapastenague/a-deconstruction-of-routers-and-modems/apple-time-capsule-repairers>
8. <http://sites.google.com/site/lapastenague/a-deconstruction-of-routers-and-modems/apple-time-capsule-repair>
9. <http://sites.google.com/site/lapastenague/a-deconstruction-of-routers-and-modems/apple-time-capsule-repair/apple-time-capsule-repair-type2>
10. <http://www.apple.com/feedback/timecapsule.html>
11. <http://www.applefritter.com/node/23907>
12. <http://db.tidbits.com/search/CrashPlan>

# Theodolite for the iPhone

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What is a theodolite and why do you need one? Good questions. I'll answer them. But first some background information.

With the introduction of the iPhone 3G and 3GS, Apple introduced something that went beyond a mobile phone, mobile music player, or mobile movie player. It put a toe into the world of geography.

The iPhone 3G and 3GS come with an application, *Compass*, that can point to true north, or magnetic north, and also display your latitude and longitude. Press a zoom button and you are switched to a *Google Maps* representation of where you are, with the option of seeing the satellite view. With a few more finger presses you can get directions from where you are to wherever you want to go.

Google took advantage of these capabilities by releasing *Google Earth* for the iPhone, one of the all-time favorite iPhone applications. Other developers released applications for finding where you left your car, finding local businesses based on location, and other location-aware functions.

Hunter Research & Technology took a different path. Rather than use your location to tell you more about the world around you, Hunter developed *Theodolite*, to tell you more about where you are.

A theodolite is a surveying instrument that can trace its history back half a millennium, to the time when surveyors first started taking advantage of both telescopes and compasses. Telescopes, together with a simple pendulum and ruler, allowed surveyors to determine the height and width of objects, even at

a distance, based on horizontal and vertical angles. Combined with increasingly accurate compasses, theodolites helped build large palaces and fortifications, and revolutionized surveys of coastlines and mapmaking. Today, theodolites are a standard tool of surveyors, used for plotting housing subdivisions, determining property lines, planning highways, and almost any other task for which exact spatial coordinates are required.

**Figure 1:**

*Theodolite* photo of the building housing Washington Apple Pi's corporate offices. Overprinted information includes the date and time, a position of 39.0539°N and -077.1067°E, with an altitude of 384 feet. The photo was taken with a bearing of 292.3°, an elevation angle of +0.7°, and a horizontal angle of +02.1°.



**Figure 2:**

*Theodolite's* screen shows an image as viewed through the iPhone camera overlaid with various buttons and readings. This screen capture was made in Olney, MD, at +039.1449°N, -077.0419°E, altitude 440 feet, near Olney Theater.

*Theodolite* for the iPhone makes no pretense of being a precision surveying instrument. Hunter describes it as an augmented reality application, “that serves as a compass, GPS, map, zoom camera, rangefinder, and two-axis inclinometer.” *Theodolite* takes photos and overprints location information, as shown in Figure 1, including date and time, latitude and longitude, elevation, bearing (position with respect to true north), elevation angle, and horizon angle.

Figure 2 shows how *Theodolite* appears on the iPhone's screen. While it initially looks a bit cluttered, it is logically divided according to function. Various buttons along the edges allow you



to: bring up a screen for adjusting settings and doing calibrations; launch Safari so you can read the documentation on Hunter's Web site; launch *Google Maps*; zero reference your settings; determine distance via A/B references; “zoom” the camera; and (the button in the lower right corner) take a photo.

Most of the screen is given over to whatever you are viewing through the camera, overlaid with latitude and longitude, elevation, elevation angle, horizon angle azimuth and bearing, and a central target grid. The central grid is the most important feature when taking a photo, as it helps you (if you are paying attention) hold the iPhone with minimal horizontal and vertical tilt.

To evaluate the accuracy of *Theodolite*, you need an exact reference point for comparison. I chose Hassler Park, a tiny little concrete and stone enclave off East-West Highway, just a few hundred feet from the DC line. The park is dedicated to Ferdinand Hassler, a Swiss surveyor appointed by Thomas Jefferson to be the first Superintendent of the United States Survey of the Coast. In the center of the park is a marble plinth topped by a brass marker placed by the Coast and Geodetic Survey (the modern successor to the Survey of the Coast) in 1993, establishing it as the Hassler triangulation station. An online form allows you to recover the station GPS information (see References).

*Theodolite*, taking a photo directly over the marker (Figure 3), recorded the position as +38.9927°, -077.0313°, with an altitude of 397 feet. The Coast and Geodetic Survey indicates the marker is at 38° 59'34.03378" N, 77° 01'52.39173" W, with no indication of height. Factoring in the differences between decimal degrees and degrees, minutes and seconds, and GPS interference from tall buildings surrounding the park, the two sets of coordinates are a very close match.

**Why should I care?**

*Theodolite* has a number of uses, from house shopping (take a photo of a house and then use the LAT/LONG information to look up information about the neighborhood) to hiking (take a photo of some object or place, and look it up after the fact), to, in my case, photography. While there is a GPS attachment for my most capable camera, it costs as much as an entire digital point and shoot camera, and makes my already large camera even more cumbersome. But with *Theodolite*, I can capture a wealth of GPS information with my iPhone, and then add it to the photo *ex post facto*.

In practice this works reasonably well, albeit with some limitations. For example, a photo taken inside Verizon Center before a concert gave LAT/LONG information that placed me across the street, at sea level. Except for the altitude, this was surprisingly accurate, given that the iPhone can't pick up GPS satellite information inside a building. Photos taken outdoors tend to be accurate to within 10 to 50 feet; trees, buildings, and strong sources of radio noise are all limiting factors. For my purposes, the results are excellent.

Emboldened, I tried out *Theodolite* in Scotland. In keeping with Scottish tradition, I was too cheap to buy a UK data plan, and left the iPhone in "Airplane" mode. Not surprisingly, *Theodolite* claimed I was still in Maryland, along a lonely stretch of Route 108. Why it picked that part of Maryland isn't clear, but every photo I took in Scotland was imprinted with the same LAT/LONG. Presumably turning the iPhone radio on would have corrected this problem, although it is unclear whether I would have needed a UK data plan as well.

Taking photos with *Theodolite* isn't all that easy, mostly because taking a photo with a smooth-sided iPhone isn't easy. Several images have a geo-referenced view of a finger, due to the unfortunate placement of the camera lens, and a couple have a view of part of the iPhone carrying case.



**Figure 3:** The Hassler Triangulation Station survey marker, shot from directly overhead with *Theodolite*. Overwritten on the image is the time and date, a position of +038.9927°, -077.0313°, an altitude of 397 feet, azimuth/bearing of 139° S41E, elevation angle of -87.3°, horizontal angle of +160°, and no zoom. The information is displayed slightly differently here than in the photo of the Pi offices, taken four months earlier, thanks to updates from the publisher.



One surprise: while a normal iPhone 3GS photo has LAT/LONG information in the photo's EXIF data, and this can be picked up and used by the Places function in *iPhoto '09* or *Aperture 3*, *Theodolite* does not include LAT/LONG in the EXIF data. When I asked the publisher about this, I was told that Apple does not allow developers access to the EXIF data, probably for privacy reasons. Apple probably doesn't want evil developers to create apps that might be used to secretly track the user.

*Theodolite* is available in three versions: *Theodolite Free* (which is, of course, free); *Theodolite Basic*, for \$1.99; and *Theodolite Pro*, for \$3.99. It is a bargain. For a brief primer on digital compass readings, see the sidebar article, *Degrees of separation: compasses go digital*. For more illustrations of *Theodolite* in use, check the Pi Web site at:

<http://www.wap.org/journal/theodolite/>



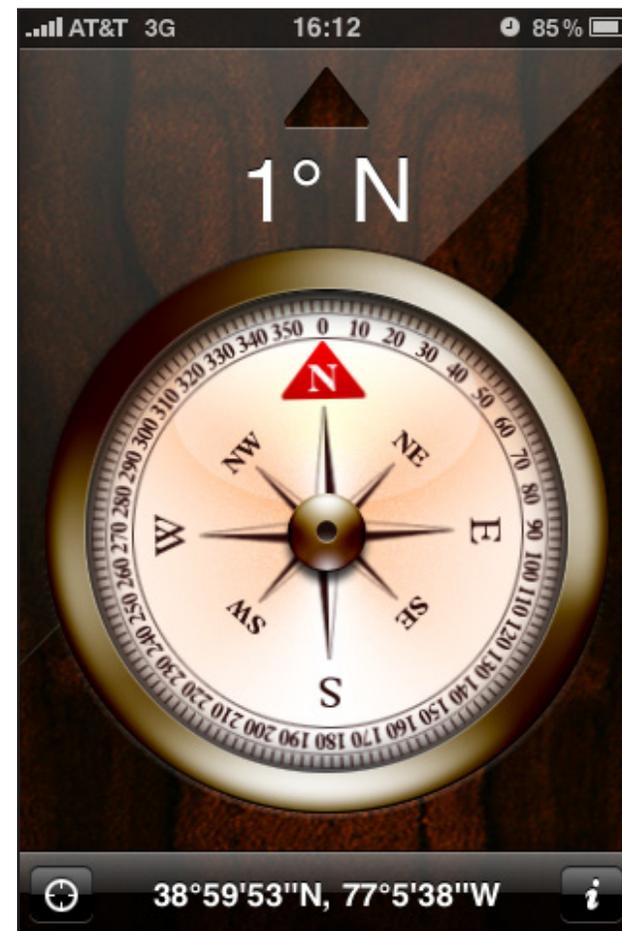
## Resources

*Theodolite*, \$3.99 from the iTunes store,  
<http://itunes.apple.com/us/app/theodolite/id339393884?mt=8>

*Theodolite* information on publisher's Web site,  
<http://hunter.pairsite.com/theodolite/>

Geodetic marker station retrieval:  
[http://www.ngs.noaa.gov/cgi-bin/ds\\_desig.prl](http://www.ngs.noaa.gov/cgi-bin/ds_desig.prl)

Information about Ferdinand Hassler:  
[http://celebrating200years.noaa.gov/survey\\_marks/hassler/](http://celebrating200years.noaa.gov/survey_marks/hassler/)



A screen shot of the Compass application included as a standard feature on the Apple iPhone 3GS. The photo was taken from roughly the same spot as the survey marker for Hassler Park, mentioned in the article.

# Degrees of separation: compasses go digital

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If you remember back to those idyllic days when you were taking trigonometry, you may recall that a circle is divided into 360 degrees, each degree is divided into 60 minutes of arc, and each minute is divided into 60 seconds of arc. Dividing a circle into 360 degrees dates back to both Babylon, where the year was divided into 360 days, and to India, where the *Rigveda* divided life, the heavens, and the year into 360 units. Once you completed trigonometry, you probably promptly forgot all of this – until you bought a GPS unit for your car, or found one included with your mobile phone. Suddenly, those 360 degrees became important again.

A compass is the classic representation of the division of a circle. North is always at zero, at the very top, and the degrees march around clockwise to East at 90, south at 180, West at 270, and North back at zero (or 360). A compass heading of 45 degrees, then, would be heading to the northeast.

Longitude (representing a location by determining how far east or west it is) and latitude (representing a location by how far north or south it is) are projections of a compass onto a globe. Moving from a flat plain to a sphere doesn't fit terribly well, so cartographers invented the Prime Meridian and the Equator.

The French had their Prime Meridian running through the Louvre (once a royal palace) in Paris. The British had their Prime Meridian running

through the Naval Observatory at Greenwich, in southeast London. The U.S. had a Prime Meridian too, running through the Naval Observatory in the western wilderness District of Columbia (well, it was pretty wild in 1830). As international commerce became more common, these multiple standards proved confusing, so the Prime Meridian – zero degrees longitude – is now universally\* defined as running through Greenwich, and the 180<sup>th</sup> Meridian runs through the Pacific. Together they form a perfect circle through the North and South Poles.

Longitude is measured in degrees, minutes and seconds West or East of the Prime Meridian. The U.S. Naval Observatory, for example, is 77° 3' 2.3" W, or less than a quarter of the way west around the world from Greenwich. Kyoto, Japan, which had a Prime Meridian used for 18<sup>th</sup> and 19<sup>th</sup> century maps, is at 135° 74' E, three quarters of the way east around the world from Greenwich.

Latitude is determined in degrees North or South from the Equator. If you are on the Equator, your latitude is zero. If you are at the North Pole, your latitude is 90° N; at the South Pole it is 90° S. The 45<sup>th</sup> latitude North is halfway between the Equator and the North Pole; in the U.S., it runs from Oregon to Maine.

Over time, the degrees, minutes and seconds format got a bit confusing, since we don't normally think of things in units of 360 or 60. With the advent of GPS,

an opportunity came to simplify things, by going digital. The Washington Apple Pi office in Rockville, for example, is at 39° 01' 03.75" N, 77° 03' 09.80" W in classic notation, or 39° 1.063' N, 77° 3.163' W in decimal minutes, or 39.017709° -77.052723° in decimal degrees.\*\* The minus sign before longitude indicates something is West of Greenwich; a minus sign before Latitude would indicate something is South of the Equator. Decimal degrees are gradually becoming the new standard format for location. The National Weather Service uses decimal degrees on its forecast pages, and most GPS units use decimal degrees. *Google Earth* will display location in decimal degrees, degrees with decimal minutes, classic degrees, minutes and seconds, and two other formats, at your option. Apple's *Compass* application on the iPhone is very retro: it offers just degrees, minutes and seconds.

With all this information, you should have no trouble finding the Pi General Meeting at 38.829° -77.306°, which is Enterprise Hall at George Mason University, in Fairfax, VA.

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\* If the universe is defined as one planet.

\*\* The accompanying article on *Theodolite* shows a photo of the Pi office building but gives slightly different coordinates. However, that photo was taken from across the street, and reflects the position from which it was taken, slightly to the east and south.

# Participating in Distributed Computing

By Jay Castillo

**T**he term distributed computing refers to any computing that involves multiple computers in different locations that are involved in the same computation problem or information processing. It includes volunteer computing projects, in which individuals allow some of their computer's processing time to be used for research or public interest projects. It also includes citizen science projects, in which volunteers participate in research projects from their home computers.

What has made this activity possible is the astonishing progress in computer technology over the past 70 years. The decrease in size and cost and the staggering

increase in computational speed of computers have been amazing. For example, according to [www.computersciencelab.com](http://www.computersciencelab.com), the first programmable computer built in the U.S. in 1941, was the Mark I, built as a partnership between Harvard and IBM. Constructed of switches, relays, rotating shafts, and clutches, it weighed five tons, used 500 miles of wire, was eight feet tall and 51 feet long, and had a 50-foot rotating shaft running its length, turned by a five-horsepower motor (see Figure 1).

The Mark I operated on 23-digit decimal numbers. It could add or subtract two numbers in three-tenths of a second, multiply them in four seconds, and divide them in ten seconds. Forty-five years later, computers could perform an addition in a billionth of a second. Even though the Mark I had three-quarters of a million components, it could only store 72 numbers. The principal designer of the Mark I, Howard Aiken of Harvard, estimated in 1947 that six electronic digital computers would be sufficient to satisfy the computing needs of the entire United States. IBM had commissioned Aiken's study to determine whether it should bother developing this new invention into one of its standard products (up until then computers were one-of-a-kind items built by special arrangement). His prediction was not unreasonable, as there were very few institutions (principally, the government and military) that could afford the cost of what was called a computer in 1947. Today, there are approximately one billion personal computers in the world, according to a Google search.

Distributed computing allows researchers to take advantage of the excess processing capacity in these personal computers, and allows individual volunteers like me to contribute to the solution of real world scientific or mathematical projects without having to be an expert scientist or mathematician, and to do it as a hobby. Once a volunteer has registered and downloaded the project software, his or her computer is provided packets of data, which are processed in the background. As long as the computer remains on, the data processing continues. The activity is invisible to the volunteer, save for the messages informing him or her of the project progress, and the "score" of the particular volunteer. The volunteer can monitor this score, and can also determine how the project software is able to use the computer resources.

## The Berkeley Open Infrastructure for Network Computing (BOINC)

BOINC (<http://boinc.berkeley.edu>) is a (free) non-commercial program for distributed computing developed by a team at the University of California. As of April 24th 2010, BOINC had about 583,000 active computers (hosts) worldwide processing on average 5.128 **petaFLOPS**; this exceeds the processing power of the current fastest supercomputer system ([Cray XT5 Jaguar](#)). There are about 321,000 volunteers participating. Using BOINC, individuals can contribute to biology and medicine, mathematics, physics and astronomy, earth sciences, and

**Figure 1:**  
The Harvard/IBM Mark I Digital Computer.

multi-applications projects. (There is a list of developed projects to join at [http://en.wikipedia.org/wiki/List\\_of\\_distributed\\_computing\\_projects](http://en.wikipedia.org/wiki/List_of_distributed_computing_projects)).

I participate in two BOINC projects. The first is [SETI@home](#), which searches for possible evidence of radio transmissions from extraterrestrial intelligence using observational data from the Arecibo Radio Telescope. The data are taken passively while the telescope is used for other scientific programs. The data are digitized, stored, and sent to the SETI@home facility. The data are then parsed into small chunks in frequency and time, and analyzed, using software, to search for any signals—that is, variations that cannot be ascribed to noise and that contain information.

The second project is [Einstein@Home](#). The Einstein@Home project searches for continuous wave sources of gravitational radiation via an “all-sky search.” These sources may include gravitational radiation from pulsars. Einstein@Home may result in the first confirmed direct detection of a gravitational wave. A successful detection of gravitational waves would constitute a significant milestone in physics, as it would be the first detection of a previously unknown astronomical object by means of gravitational radiation alone. The Einstein@Home program processes data from two satellites’ instruments using Fast Fourier Transforms. The resulting signals are then analyzed using a method called *matched filtering*. This method involves the computation of hypothetical signals that might result if there were a physically plausible source of gravitational waves in the part of the sky being examined. The measured signal is then compared to the hypothetical signal. A matching signal is a candidate for further examination by more

sophisticated analysis. My only direct involvement with these projects is to occasionally check to see how much data I have processed and to visit the project homepage.

**Hands-On Participation**

My favorite mode of distributed computing is what is known as a citizen science project, where I am directly involved in making judgments and decisions about the project. The volunteer goes directly to the project Web site and personally “processes” the data. I participate in the “Zooniverse, Real Science Online” (<http://www.zooniverse.org/home>).

In these projects, I register, log in, and undergo a training session for making the desired judgments and decisions. Galaxy Zoo: Hubble is my favorite project. Images of galaxies from the Hubble Space Telescope are provided, and I answer a series of questions to classify the galaxy (see Figure 2). I enjoy the mental stimulus, and I relish the amazing galactic images. In April 2010, Galaxy Zoo: Hubble completed the classification of 60 million galaxies for the Sloan Digital Sky Survey.

My second project is Solar Stormwatch. This one is

more challenging. The participant is presented videos of satellite data (after proper training) and asked to identify solar storms (see Figure 3). The judgment criteria are not as clear-cut as in Galaxy Zoo: Hubble, but it’s fun and challenging.

I have recently joined my third project, Galaxy Zoo Supernovae. This one is much like classifying galaxies.

**Figure 2:**  
Galaxy Zoo: Hubble



The user is asked to observe two images of the same space taken at different times, and by answering sequential questions, attempts to identify supernovae, that is, extremely bright, exploding stars (see Figure 4).

All of these projects are interesting and enjoyable, and contribute to scientific knowledge. If the project allows, one can have one's name added to the list of authors for scientific journal articles published as a result of the analysis. I have contributed to one paper so far (joining many, many other people as fellow authors).

Distributed computing is a great way to make the most of the tremendous technology we have at our fingertips. Get started!

**Figure 4:**  
The Hunt for Supernovae

**Figure 3:**  
Solar Stormwatch

**Did you know?**

Clicking on Figures 1, 2, 3, and 4 will take you to the respective Web sites.

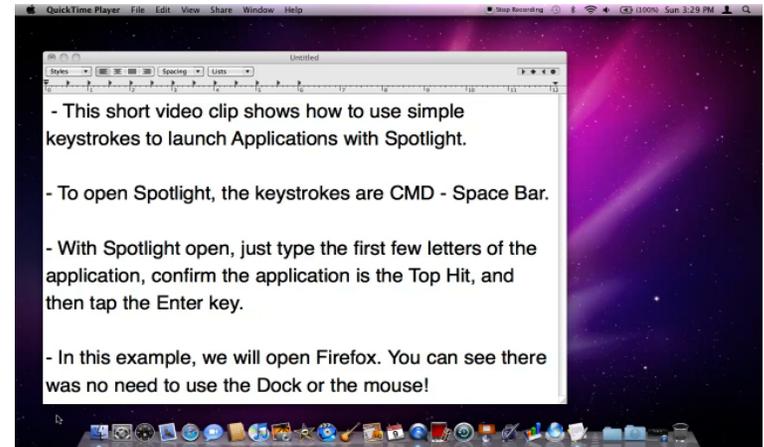
# Using Smart Folders in Snow Leopard, or, How to find files on your Mac

© 2010 Jonathan Bernstein

**A**ll of us have used the Mac's Finder application to organize our folders and files, and then gone rummaging through them in search of something. The searching has become easier now, since Macs started using new document management databases that rely not on a folder structure, but on a search method based on the information contained in each file. Users can now find files much more quickly using Spotlight, the built-in search capability. Navigating through a hierarchical folder structure is so 2005!

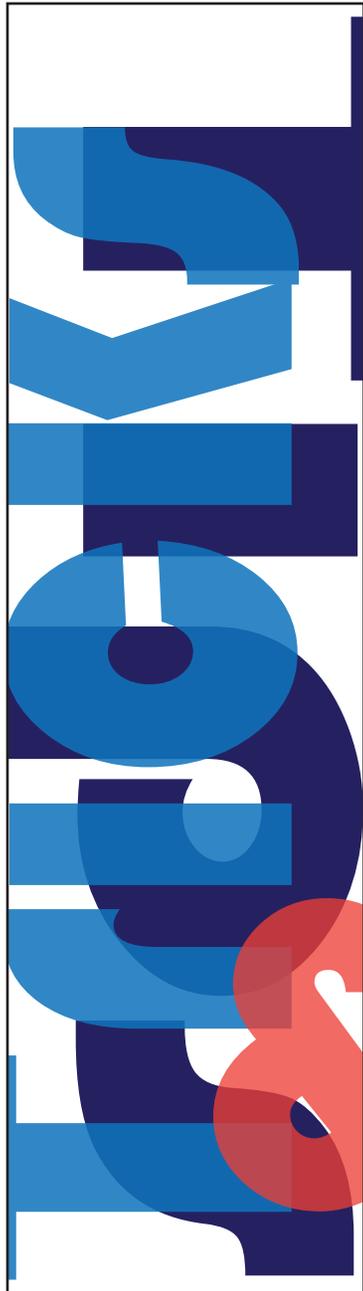
The process for creating folders on your Mac is still quick and easy. The process for finding them when you need them is fast and easy now too. You can still search through Finder; you can also access Spotlight directly, either by clicking on the magnifying glass icon at the top right of your screen [See Figure 1], or by using the keyboard shortcut: Command - space bar.

Figure 1.



Click on the image to launch the video.

When you type the name of a file or application into Spotlight, it will automatically search all file types – documents, images, folders, songs, emails, contacts, applications, etc. [See Figure 2] – unless instructed otherwise. You can customize the search by clicking on “Spotlight Preferences” at the bottom of the search results window [See Figure 3]. There you can choose what types of files you want Spotlight to search, and the order in which Spotlight displays the results. You can also look at the search results in a Finder window, by clicking “Show all” at the top of the Spotlight search results window.



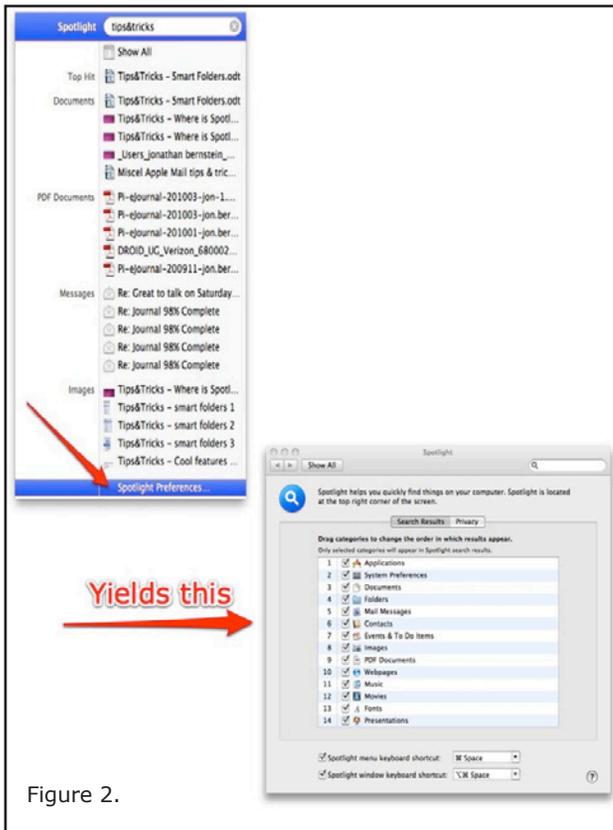


Figure 2.

In Finder, you can change the search parameters in more ways than you can through Spotlight Preferences. For example, you can narrow the search to the name of the file by clicking “File Name” at the top of the Finder search window. [See Figure 4] You can limit the search by time, or by file type, by going to the bottom left section of the Finder sidebar labeled “Search For.” You can select from three parameters in each category:

**Time**

- Today
- Yesterday
- Past Week

**File Type**

- All Images
- All Movies
- All Documents

You can also click on the ” +” at the far right top of the window. See Figure 5, to choose from a whole host of other search conditions [See Figure 6].

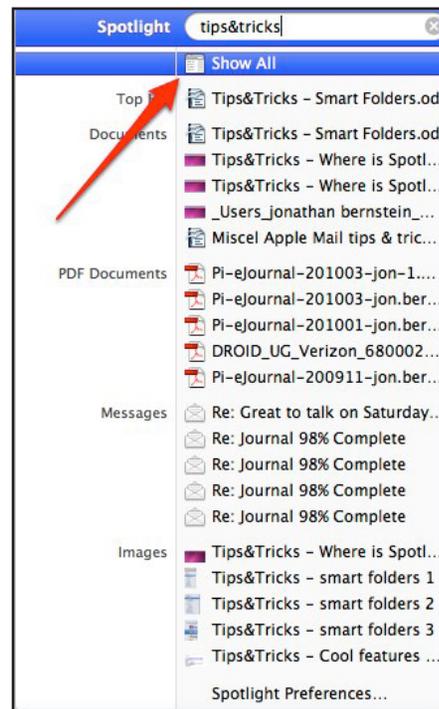


Figure 3.



Figure 4.



Figure 5.



Figure 6.

### Saving Searches to Create Smart Folders

Did you know that you can save a search? Just click on the “Save” button at the top right of a Finder search window, and you will save the search that you just conducted. In Mac OS X Snow Leopard, saved searches are called Smart Folders. They are Smart because they are the actual saved search query and because, whenever you select one, it will automatically update your search.

The time and file type search options in the Finder window are Smart folders that the operating system has already saved for you – default Smart folders – and they are so helpful. Think about it. Have you ever had the experience of not being able to find a file you just created? Click on the “Today” Smart folder and, voila, there it is [See Figure 7]! To find out more about each of these built-in Smart folders, you can right click (CTRL click) on the folder, and select “Show Search Criteria” to see what the search query includes [See Figure 8]. This will be helpful for when you create your own Smart folders.

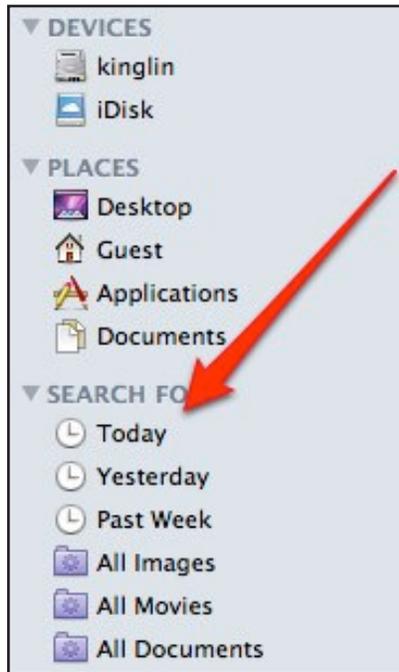


Figure 7.

Why create a personal Smart folder? Let’s assume that you regularly use Spotlight to retrieve a particular kind of document — for example, your monthly bank statements that you download as a PDF. In Spotlight or in a Finder search, enter a distinct portion of the file name you give these documents, or some distinct text from their contents. Now, activate search and see if it finds them. If it works, click “Save” and name your new Smart folder so it’s familiar to you [See Figure 9]. By clicking the “Add to Sidebar” box, your new Smart folder (i.e. your new saved query) will appear there. Another way to create a Smart folder is from a Finder window. In the top menu, under File, select

New Smart Folder, then add the search parameters you want, and save it.

As further examples, let me describe more fully two Smart folders that I have created and that I use regularly. One is the Smart folder I created that contains my downloaded credit card statements. When I retrieve them, I give them a name that starts with “Chase VISA.” Instead of using regular folders to organize them, I use a Smart folder with the file name containing “Chase VISA” and add a condition of file type where “kind” is PDF. So if I want to find one of these statements, I click on my Smart folder and voila!

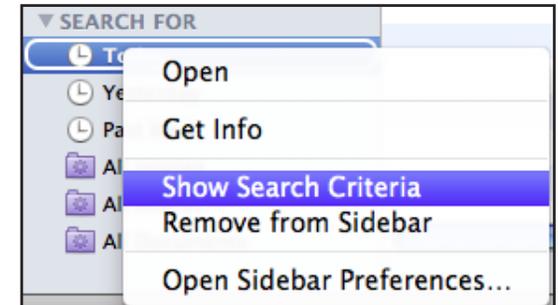


Figure 8.

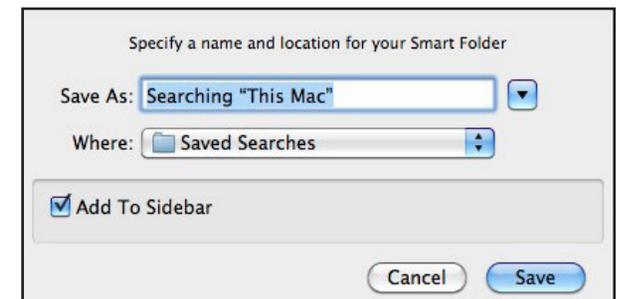
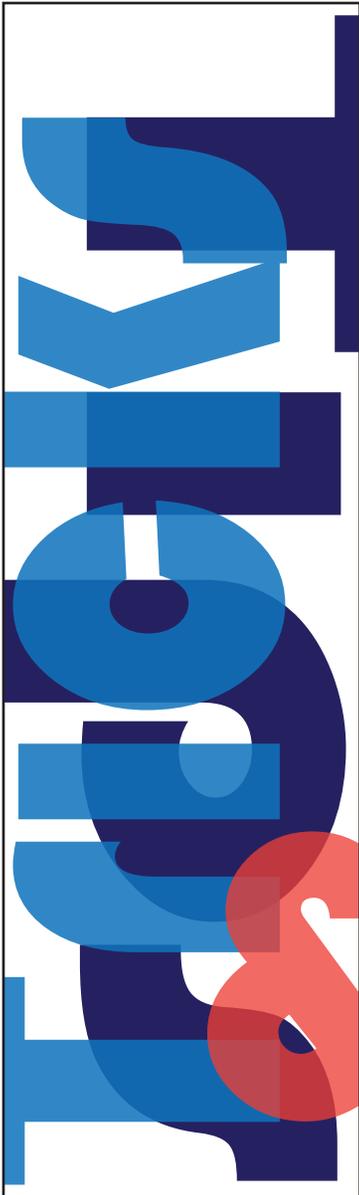


Figure 9.

Now remember, if you don’t want to even go to the trouble of naming the statement when you download it, just choose distinct content that always appears in it, such as a portion of the account number, choose “Content” rather than “File Name,” and under “kind” put in PDF. Once satisfied that you are able to view the files you want, save the search and you’re in business.



I have also created a Tips&Tricks Smart folder that you can see in the video clip demonstrating the creation of a Smart folder, and that I used to organize the various files assembled for this *Journal* article [See video clip]. Some files are saved to my Documents folder, others to the Desktop, and the screenshots or video clips are saved to a third, shared folder. My Smart folder obviates the need to manually move the files to a single location or, frankly, pay *any* attention to where they actually reside. Instead, I just remember to always name them “Tips&Tricks” (letter case does not matter), and then I can click on the Tips&Tricks Smart folder to see all of them. The process also makes it easy to upload to my *iDisk* Public folder, so the *Journal* editors can retrieve them.

I started using the Tips&Tricks Smart folder for my *Apple Mail Tips and Tricks* article in the March/April edition of the *Journal*. After that article was done, I wanted to see only the more recent Tips&Tricks files, that I had created for the next piece. So, I right click on the Tips&Tricks Smart folder; choose “Show Search Criteria;” click the + to add a condition; choose “Last modified date;” and add a date (March 15, 2010) after my previous submission [See Figure 10]. I click “Save” and the new condition is now part of my Smart folder, thus allowing me to see only the more recently opened files.

Our Macs are Smart! Smart folders in the Finder, Smart Mailboxes in Apple Mail (to automatically treat incoming mail) and even Smart Groups for organizing Address Book Contacts! All these applications use Snow Leopard’s robust Spotlight search capability. Would you like to know more about these topics? Send us your [feedback](#).

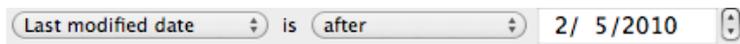
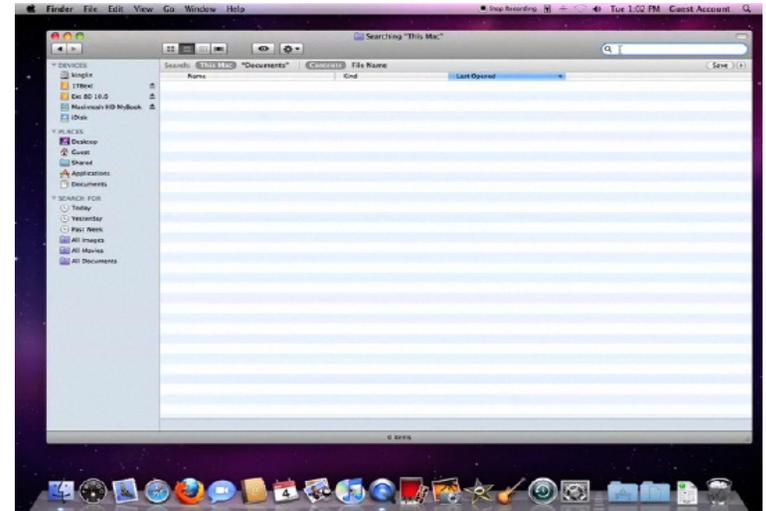
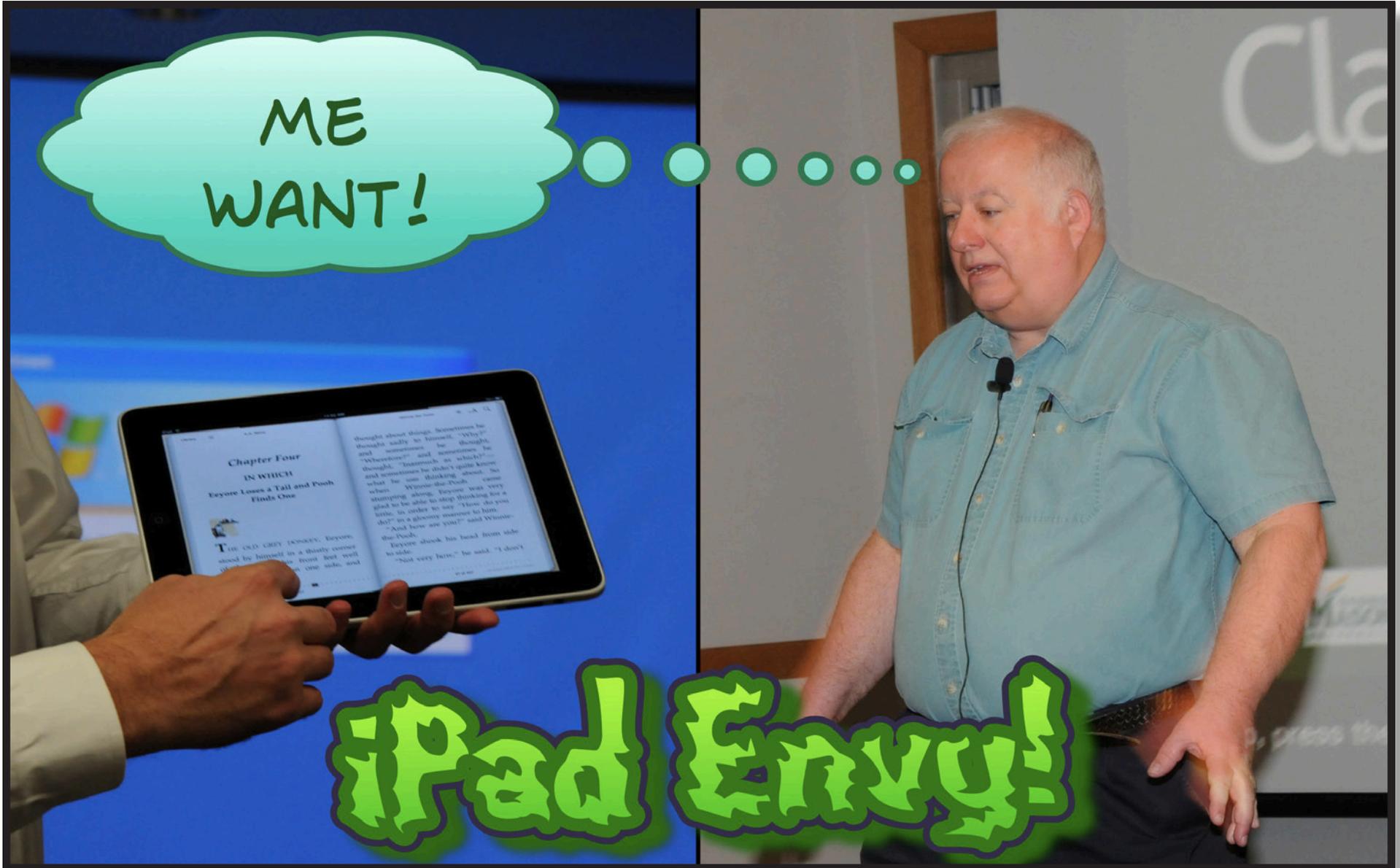


Figure 10.



Click on the image to launch the video.





## Opportunities to Help

**V**olunteers are the lifeblood of the Pi. Plain and simple, we need more dedicated volunteers to carry the water. There are small tasks, big tasks, and medium-sized tasks. Your interest and talents dictate what you do, but for certain, all your efforts will be appreciated. Please consider making a commitment to ensure that the Pi remains a strong, viable, and energetic club dedicated to helping its members. Jump in; the water's fine!

### Featured Position – SIG Leader

A recent Pi survey indicated that there are dozens of members interested in belonging to a Mobile Devices Special Interest Group. The principal requirement for establishing such a group is finding someone to head it. If you have the interest and some extra time, look over the following prerequisites.

This SIG leader needs to be able to schedule, organize, and conduct group meetings. A key responsibility is to recruit interesting, knowledgeable presenters, and you should strive to have the program set for at least two consecutive meetings. While as SIG leader you are not required to make meeting presentations, you should be familiar enough with the SIG's theme and focus to offer meaningful assistance to those seeking answers and advice. As leader you will also be expected to notify the Webmaster and the Publications Committee chair of the upcoming activities so that they can inform the full membership.

There are other tasks associated with leading a SIG, but none is as time-consuming or sensitive as the above. Some of these duties are to administer a SIG email list, to coordinate a meeting location, and periodically to report on the group's status and meeting results to the Management Committee. If you have an interest or any questions, contact the Management Committee Chair, Jay Castillo, at [president@wap.org](mailto:president@wap.org).

### General Meeting Manager

Our General Meeting programs need someone dedicated to the planning and managing of these important club events. The job includes coordinating meeting activities, making any necessary arrangements, and managing the behind-the-scenes specific tasks. While it sounds like a job for Superman, that really is not the case. If you have juggled a household or been an office administrator, you've got the skills. While another Pi manager emcees the meeting, you will be making them look good!

Because this volunteer activity needs to be approved by the Pi's Management Committee, this person will serve as an adjunct member of that committee. This volunteer opportunity is guaranteed to keep you busy, and when the meeting is over, lunch is on the Pi!

Send your inquires to [robert.jarecke@wap.org](mailto:robert.jarecke@wap.org).

### Video Production Editor

We are dabbling in a couple of video projects such as short tutorials and movies of the General Meetings. We need a dedicated volunteer to assist in the video editing and with post-production efforts. Experience with making movies would be helpful, but this job also could be an opportunity to learn how to produce videos and prepare them for distribution. This activity takes time, especially in the beginning, but the results should be rewarding for the volunteer and a real service to those who get to see the videos. This is potentially a game changer activity. Care to be part of it?

Send inquires to [robert.jarecke@wap.org](mailto:robert.jarecke@wap.org).

# Washington Apple Pi Meetings

## The iPad and You!

May 22, 9:30 a.m. at George Mason University



Is there an Apple iPad in your future? Are you inclined to say yes, while secretly thinking, “What can it do that isn’t already being done by my [fill in the blank]?” Well, our May General Meeting at GMU is just what the doctor ordered!

As the main presentation, at least three iPad owners will tell you how they use theirs on a daily basis. They will demonstrate apps and features that fit their unique needs. Of course, they will be taking audience questions. Come by and see (and touch) for yourself.

At present, plans call for us to meet on the GMU campus in Enterprise Hall, Room 178. The Pi Web site has the full agenda and a map on how to get there. Check back closer to the meeting date for any updates or changes.

<http://www.wap.org/events/may2010/>

## Digital Photography — Techniques, Tips & Tricks

June 26, 9:30 a.m. at George Mason University

The third Pi Photo Contest will be held this summer. Are you ready? The June General Meeting will prime the pump for the competition by announcing the details of this popular Pi event. The meeting will also be a forum for providing expert instruction and advice on how to take thoughtful, competitive images. Who knows? You might just pick up the one key tip that will add your name to the Pi’s Photo Contest “Best of Show” trophy.



Our plan is to have several past contest participants on hand to cover multiple techniques for composing and taking photo images. Whether you are a beginner or an advanced photographer, and even if you have limited interest in entering the contest, this meeting can still be informative and entertaining. Mark your calendar; this is the start of something big!

This meeting will also be held at the GMU campus in Fairfax, VA. Enterprise Hall, Room 178. Go to the Pi Web site link below for details and any updates.

<http://www.wap.org/events/june2010/>

**Pi General Meetings are planned and executed by Pi volunteers. Please, consider helping at these events, as well as with other Pi activities. Volunteers, welcome!**

As always, check the [Pi Web site](#) for additional, updated details on these meetings.

# Washington Apple Pi



**members**  
helping  
**members**