South Bay Apple MUG
Macintosh

March 2017

Apple's New MacBook Pro: Fast and Light, but Not for Everyone, *by Brian X Chen, NY Times*

When Apple unveiled its new MacBook Pro laptops at a media event last month, Adam Leventhal, a software engineer, was eager to learn about them.

Yet by the time he finished watching a live stream of the event, Mr. Leventhal, who has owned only Mac computers for the last 30 years, was turned off. "With this one I was really disappointed," he said.

For a new laptop, the MacBook Pro has been divisive. That may partly be because the model, which has long been used by creative professionals and coders, has stayed largely the same since 2012. So this time, when Apple introduced some fairly radical changes, emotions among some longtime Mac customers ran high.

In their latest incarnation, MacBook Pros have only one type of connection port, as opposed to the several types they had before. That will require people to buy adapters to plug in devices that use different types of connectors. On the keyboard, Apple also replaced the top row of physical keys, including the Escape key, with a virtual touch strip called the Touch Bar.

The benefits? The new laptops are faster, much thinner and lighter than the previous generation, and they have about 10 hours of battery life. The Touch Bar's virtual buttons transform depending on the app you are using, unlocking the potential for software makers to create custom shortcuts.

I tested the new MacBook Pros — which cost $1,500 to $2,800, depending on the model — while gathering reactions to the new computers from engineers and information technology professionals over two weeks. I concluded that while the new laptops are capable enough for many professionals, there is no need to rush to buy one.

Feb 22 Meeting
Wunderlist, by Allison Sheridan

Allison Sheridan of the NosillaCast Mac Podcast is coming back to SBAMUG, this time to teach us about a free application called Wunderlist. If you're overwhelmed by the GTD (Getting Things Done) methodology and have more simple needs, Wunderlist may be for you. She'll show you how to organize your to dos, set due dates and alarms, share lists with others, assign to dos to others, add attachments and notes, and even sub-tasks to your to dos. If you haven't seen Allison speak before, you're in for a treat. One of her favorite wisecracks is, "I'm not always right, but I'm always entertaining!" You can find her podcasts at http://podfeet.com
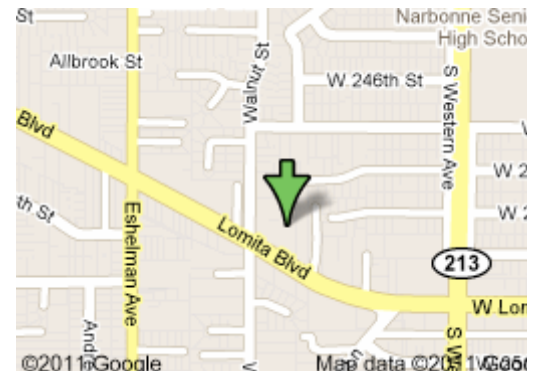
Don't miss the meeting! See page 2 for details.

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

Welcome to the SBAMUG
South Bay Apple Mac User Group

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

Lomita Veteran's Hall,
1865 Lomita Blvd, Lomita

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

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

SBAMUG Monthly Calendar
Feb 22: Wunderlist
Mar 29: OS 10.12 Sierra

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

Membership Report – 103 members!
Please wear membership card as your name tag - you may notice your first name is in larger letters on your card - so it can be used as a name tag at the meetings.:)
Welcome New Members:
Renewals: John Kells, John Spearman ,Joan Kraus, James Pernal, Douglas Baker, Erik Nilsson, Fran Pullara, Don Baggett, C.D. Knauer, Bill Berks, C.W. Mitchell, Bob Lay
If your name is not spelled right or your expiration date is wrong, contact cwmitchell@sbamug.com for correction. Or contact CW for everything membership, dues and benefits. Please watch for your renewal letter, then sign and date it and return it with $35 check (in enclosed self-addressed envelope) or bring letter with payment to meeting.

SBAMUG February 2017 Shareware

This is the February shareware article. I've thought a bit more about the title and for now will keep it as shareware, even though I'll be including Mac App store apps. Limited scope review of new shareware, freeware, trial ware, donationware, public domain along with limited sampling of new Mac App store apps both free and those that cost you money…. etc seems to be a bit awkward don't you think for a title?

Carbon Copy Cloner 4.1.13 Latest update to this hard drive backup program, $39.95 OS X 10.8+ http://bombich.com

File Juicer 4.5.4 Extract images, video, sound, or text from files and folders. Shareware $18.00 OSX 10.9+ http://echoone.com/filejuicer/

UTC Clock 1.1 UTC Clock is a simple clock designed to display UTC (GMT, zulu, etc.) time under the menu bar clock. Free, OSX 10.4+ Intel/PPC (one of the few still supporting the PPC!) http://www.northernsoftworks.com/utcclock.html

vCard Editor 2.4.3 Mac App store app. Lets you edit and create Vcards. Vcard is one type of a universal exchange format for contact information. $3.99 OSX 10.7+

Wiz Solitaire Second Mac App store app. It is a collection of more than 20 classic card games (Klondike, FreeCell, Spider...) with the possibility to create and use beautiful decks with your favorite pictures. $9.99 OSX 10.7+

Zoommy 3.0 App to pull free stock photos from 50 sources online. Search functions. Shareware. $4.99 http://zoommyapp.com

See you at the February meeting. No PD CD for January-February 2017 will be available at the February meeting since as stated last month, it has been discontinued. However I will bring the box of older CD's to the meeting for the next few months.
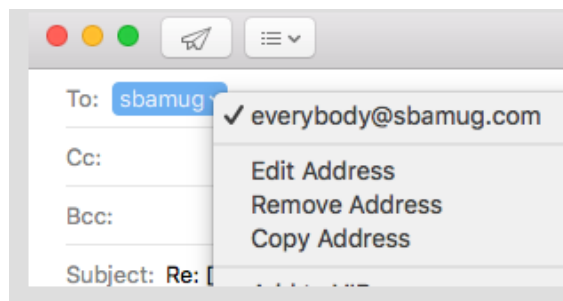
Jim Pernal PD Editor

Chat Room

iOS 10.1 includes the beta of the new Portrait mode for the iPhone 7+. Portrait mode applies what they call a depth effect, blurring things in the background while keeping the focus sharp on faces in the foreground. The effect is limited to the 7+ because it uses the dual cameras to produce this effect. Two lenses, and a LOT of math.

Like the HDR mode on iPhones, you get two copies of every photo. One is a "normal" image and the second has the depth effect. Having the two side by side really highlights the advantages of using portrait mode. Allison says the depth effect is really good for blurring out extraneous items that you don't want in your portrait.

When you reply to an email sent to you by an email group, the reply goes to everyone in that group, unless you choose otherwise. If you want to reply to the sender only, use "edit address", and type in his/her email address, if you have it. The screen shot below shows the edit address option for Apple Mail. On some email groups (Nextdoor, for example) you can send a private message. On everybody@sbamug you do not have this option.

Allison says nobody does marketing better than Amazon. On Cyber Monday, Amazon sent out an email specifically for Echo owners. The deal was pretty cool. If you used your Amazon Echo to order one of the things on their list *using your voice*, you'd get 25% off the purchase price and a $10 Amazon gift card. This was too good to pass up. I went to the kitchen where I have the Echo Dot, and called out her name. The little blue / turquoise ring floated around the top to let me know she was listening. I said, "Order a Fire Stick." She said, "it's not in stock right now, but will ship on Thursday. The price will be $29.99 plus tax. Do you want to order it?" I said, "yes". It was the most frictionless purchase I've ever made. Now think about what Amazon accomplished here:

- They got me to buy something
- They taught me how to use what I'd already bought to buy more things
- The thing they got me to buy was a device to help me buy and rent video content from them
- They gave me a gift card… so I could buy more things from them
- And they taught me to like it

Here are the highlights and lowlights of the new MacBook Pros:

USB-C: Stock Up on Adapters

With the new laptops, Apple has gone all in on USB-C, the next-generation USB port. This small, oval-shaped connection is expected to replace the bulkier, rectangular port known as USB-A on many computing devices and accessories in the next few years.

In my tests, having only USB-C on the MacBook Pros was the biggest change. The previous MacBook Pros included USB-A and some other types of ports, including HDMI, for connecting devices like printers and monitors. Now the USB-C ports will be the only way to hook up just about everything, including power chargers, external screens and photo-card readers, to the laptop. The entry-level MacBook Pro has two USB-C ports, and the higher-end models include four.

What this means in the near term is that you may have to buy adapters to plug in devices with different connectors. Annoyingly, that includes the iPhone power cable, which has a USB-A connector. So to charge an iPhone on a new MacBook Pro, for example, you have to hook up the cable to a dongle that connects USB-A and USB-C devices. The transition to USB-C might be a headache, but it is easily resolved by picking up some inexpensive adapters. I bought mine from Monoprice.

In the long run, Apple's shift to USB-C will help set an industry standard, said Brian Denslow, a technician for TechCollective, an information technology consulting company in San Francisco. The goal is to reach a point where all peripheral devices are made with a USB-C connector. So eventually you won't need adapters. "We're going to cut ties with the past and go with the new standard, finally," Mr. Denslow said.

Touch Bar: A Blank Slate

With the Touch Bar, Apple intended to replace some outdated keys with a versatile strip that adapts to the apps you are using. Apple also built a fingerprint sensor into the Touch Bar.

The Touch Bar is a breeze to get the hang of, but I didn't find it helpful in streamlining tasks. If you open the Photos app, for example, the Touch Bar displays thumbnails of photos in your library, and you can tap one to select a photo to edit. That's neat, but why not just select the photo on your laptop screen? When using the Safari browser, you can use the Touch Bar to select a different browser tab — but using keyboard shortcuts (Command+1 to choose the first tab, for instance) is quicker.

The Escape key also exists as a virtual button on the Touch Bar. I didn't mind that because I rarely use this key, but the design decision made Mr. Leventhal, the software engineer, wince. He said the physical Escape key was crucial for coders, and not being able to press it seemed crippling.

The jury is still out on whether the Touch Bar will be a must-have. When switching back to a laptop with a normal keyboard, I didn't feel as if I was missing anything. But much like the iPhone on Day 1, the Touch Bar is essentially a blank slate, and the onus is on app developers to make it more compelling.

Speed and Memory Limits

Many Apple loyalists have fixated on the memory constraints and underwhelming performance of the new MacBook Pros. The new models have a maximum of 16 gigabytes of RAM — the same limit as the previous MacBook Pro — and roughly the same processor speed as the last professional notebooks. But that's not the full story.

The new notebooks are much faster in some ways than older models, while other parts are only slightly faster. In speed tests run with the app Geekbench 4, the 15-inch MacBook Pro's computer processor was only 10 percent to 17 percent faster than the 15-inch model released in 2012. Yet the graphics processor, which is crucial for heavy computing tasks, in the new MacBook Pro is about twice as fast as the one in the older model, and the storage drives are much faster, too.

The RAM limit might irk users who need power. The more RAM you have, the more applications you can open and the more quickly your computer can juggle them. The problem, in theory, is that in a few years if your future apps hog more memory, you won't be able to add more memory to MacBook Pros because the most they can hold is 16 gigabytes.

Wait for the Early Adopters

Professional Mac users are too divided on the MacBook Pro for me to make a blanket recommendation. One thing is sure: For casual users or anyone buying their first laptop, who may just want a computer for web browsing and lightweight apps, the MacBook Pro is overkill. A Chromebook, like the $430 Chromebook 13 from Dell, or the $1,000 MacBook Air, Apple's least expensive notebook

computer, are slower and have lower-resolution screens, but they are powerful enough for your needs.

The new MacBook Pros are probably powerful enough for most professionals. But if you consider yourself a power user and are skeptical about the MacBook Pro, you might wait to see whether the initial concerns are borne out after early adopters start using their machines. Plenty have already bought them: Apple said early orders for the new MacBook Pro have been stronger than for past professional notebooks.

On the plus side, these notebooks are fast, with high-resolution screens and responsive keyboards. But the Touch Bar so far feels gimmicky, and not many devices or accessories come with USB-C connectors yet. The MacBook Pros are also expensive, and some users may end up spending thousands of dollars above the retail price for add-ons like extra storage.

So if you aren't ready to make the jump to USB-C and you don't want to spend a big chunk of your savings, it's reasonable to wait for the new Apple notebooks to realize their potential or drop in price.

Mr. Leventhal says he is exploring other options such as a Hackintosh — a generic PC that is modified to run the Mac operating system. "It's a dark place where you're doing something that is basically illegal and spending a ton of time to even make it feasible, but I have no good options," he said.

Fighting iOS Calendar Spam, *by JD Biersdorfer*

Q. *I have been getting spam invitations to my iOS calendar recently. They come from Chinese accounts and their subjects are for super-discounted Ray-Bans and the like. Is there any solution to this?*

A. Many iCloud users have recently reported an influx of spam in the form of iOS calendar events and iCloud Photo Sharing invitations. While the delivery mechanism is different, the calendar and photo-sharing invitations traffic in the same old suspect offers for cheap goods as the junk mail and text messages that came before. Unlike those older forms of spam, which can be filtered, blocked or deleted, invitation spam usually offers Accept, Decline (or Maybe) as your options — all of which notify the spammer that your account is live and ready for more unsolicited offers.

While an Ignore button is currently not available so you can quietly bury these unwanted invitations, dedicated users have come up with least two workarounds for the calendar garbage. (For the junk photo-sharing offers, turning off the iCloud Photo Sharing feature in your iOS Photos & Camera or iCloud settings seems to be the only avoidance option at the moment.)

To ditch calendar spam you have already received, open the Calendar app, tap the Calendars button at the bottom of the screen and then tap the Edit button. On the next screen, select the Add Calendars option and give the new calendar a name like Spam, Junk or something therapeutically snarky. Tap the Done button at the top of the screen a few times until you arrive back on the Calendar screen.

Select the spam invitation and move it to the new calendar you just made, and then repeat the steps for all the unwanted invitations. When you are done, tap the Calendars button at the bottom of the screen. Tap the lowercase "i" icon next to the spam calendar, and on the next screen, swipe down and tap Delete Calendar to flush the added spam without responding to it.

To make the spam invitations go to your iCloud mail — where they can be filtered or deleted more easily — instead of going right to your calendar, log onto your iCloud account on the web. Open the Calendar app, click the gear-shaped Settings icon in the lower-left corner and choose Preferences. In the Preferences box, click the Advanced tab, and under Invitations, click the button to have all calendar invitations go to your email account instead of your calendar. Click the Save button before you leave the screen.

http://www.nytimes.com/2016/11/25/technology/personaltech/fighting-ios-calendar-spam.html?hpw&rref=technology&action=click&pgtype=Homepage&module=well-region&region=bottom-

Trying Snap's Spectacles: Live With the Look, Enjoy the View, *by Farhad Manjoo*

Spectacles, the first hardware product released by the company that makes the popular photo-messaging app Snapchat, are large, whimsically goofy sunglasses with a camera embedded in the frame. It takes some courage to put them on. But I did so anyway — and I'm glad I did.

If you're lucky, you have the requisite head shape and confidence to go out in sunglasses that are essentially a four-alarm fire on your face. Maybe you'll slide these on and look like one of those shirtless models in the Spectacles ads.

Into the Titan-Sized World of Supercomputing, by Amanda Cleary Easter

The fastest computer in the United States fills a room the size of a basketball court and generates an electricity bill estimated at $9 million per year. Behind this titan-sized technology is the combined brainpower of a scientific team at the largest U.S. Department of Energy laboratory—Oak Ridge National Laboratory (ORNL)—which includes Jack Dongarra (M.S. CS '73). In his ORNL role, Dongarra helps develop methods for solving common problems that occur in scientific computing by designing algorithms and software that can solve numerical linear algebra problems for the next generation of supercomputers. In addition to his research position, he also serves as Distinguished Professor of Computer Science in the College of Engineering at the University of Tennessee. "Today computational science has become a critical part of the modeling of many natural systems in physics, astrophysics, climatology, chemistry and biology, human systems in economics, psychology, social science, and engineering," Dongarra says. "In order for it to be more realistic and accurate, we need larger computers that store a tremendous amount of data to help us better approximate the real world." Dongarra and his fellow researchers work with Titan, the second-fastest computer in the world. The most powerful computer is China's Tianhe-2, built by the National University of Defense Technology.

Dongarra says that by 2017–18 the hybrid CPU/GPU supercomputer Summit will be operational at ORNL and is expected to be 5 to 10 times as powerful as Titan. By 2023, he says, they anticipate computers operating at "exascale" (1,000 petaflops) with an exaflop goal of 1018 flops and parallelism around 1 billion. Dongarra explains that rather than using half a million threads of execution, problems will be solved using 1 billion threads of execution on the exascale computer system.

Dongarra says about half of the most powerful supercomputers are used in industries such as banking, and by companies that utilize the technology to design better products and services. While this level of technology might not be at the forefront of people's minds, the weather forecast usually is. "Today supercomputers are used to simulate what the weather will be tomorrow," he says, noting that computers operating at exascale will more efficiently and accurately estimate weather events such as hurricanes, increasing the potential for saving lives as well as reducing evacuation costs.

Supercomputers are not only forecasting the weather—they are also reaching for the stars. Dongarra was recently named to the Scientific and Engineering Advisory Committee for the international Square Kilometre Array radio telescope project. Information gathered from more than 130,000 antennas (an array) and 200 "dishes" at sites in Australia and South Africa, respectively, will be fed to exascale-level supercomputers that will analyze and process the data to help answer questions about the evolution of the universe and other cosmological topics.

Dongarra hadn't yet envisioned extreme computing when he first discovered his love of computers. He was completing his bachelor's degree in mathematics at Chicago State University with the intent to one day teach but says that "something happened that changed my life." During a final semester internship west of Chicago in the Applied Mathematics Research Group of Argonne National Laboratory, Dongarra realized how much he enjoyed working with computers. He then chose to pursue a master's degree in computer science at Illinois Tech; the university offered him an assistantship that enabled him to work one day a week at Argonne. Following graduation in 1973, Dongarra was hired full time and earned his Ph.D. in applied mathematics from the University of New Mexico, while also conducting research at Los Alamos National Laboratory. By the time he left Argonne in 1989, Dongarra had risen in the ranks to senior scientist and is currently a member of the distinguished research staff at ORNL.

Dongarra, who received the Professional Achievement Award from Illinois Tech in 2013, is a member of the National Academy of Engineering and a fellow of several organizations including the American Association for the Advancement of Science, the Association for Computing Machinery, and IEEE. In his first year at the University of Tennessee he established the Innovative Computing Laboratory and has since served as its director. The laboratory has grown into an internationally recognized research facility and compiles the TOP500, a biannual list of the world's 500 most powerful computer systems.

https://magazine.iit.edu/spring-2016/titan-sized-world-supercomputing

More online at: https://www.scientificamerican.com/article/crunch-time-department-energy-unleashes-worlds-fastest-supercomputer/

The greater likelihood is that you'll come off as if you're trying too hard, especially if you've got the red or teal Specs. (They also come in a more staid black.) But ignore the haters. Whatever your head shape, if you are lucky enough to find some Spectacles this season, you will be getting your eyes behind one of the most compelling new gadgets to be released by a major technology company in years.

Glasses outfitted with a camera sound like a gimmick, especially given Google's failure to popularize Glass, the eyeglass-computer it tried to introduce a few years ago. The glasses sell for $130, a price low enough to suggest a novelty rather than a groundbreaking new piece of tech.

They are also severely limited in supply — at this point the only way to get Spectacles is to find and wait in line at one of the pop-up vending machinesthat Snap is setting up around the country, or buy them at a premium from someone who has spent a long time waiting.

But Spectacles are worth the titters and strange looks. For a first-generation piece of hardware, these glasses are remarkably well designed, thoroughly useful and completely fun. More than that, they may be lighting the way to a future in which you might finally pull your face away from your phones when anything interesting happens around you.

Like any sunglasses, you slide them over your face when you go outside. When you see something interesting, tap the button near your left temple to snap a 10-second video of the scene. (A small light shines while you're recording, to prevent spying.) Later on, look at Snapchat on your phone to view and share the clips you've captured from your Specs.

If you aren't a regular Snapchat user, these glasses are probably not for you, but it is possible to export the videos you capture to your phone's camera roll. The video quality isn't spectacular, but it's surprisingly good, In other ways, Spectacles surpass any phone. Over the last decade, smartphone cameras have intruded upon every corner of life. This has been magical — I have fantastic pictures of my family that I'd never have captured without my phone — but it also creates an uncomfortable distance. My children's primary memory of me is of my face staring at them through a five-inch piece of glass.

Spectacles collapse that distance. You can snap a memorable moment without ever leaving the moment.

Your eyes are your viewfinder; just reach up and tap, and whatever you look at is recorded.

It's not just that Specs let you remain in the moment. When you play back what you captured from the glasses, you return to the moment more easily. The images I snapped with my Specs over Thanksgiving weekend are deeper, more real and more emotionally evocative than most other snapshots I usually shoot.

I think this has to do with point of view. When you take a picture with a camera, you are usually cropping an ideal shot that bears little resemblance to what you actually saw. But Specs don't idealize the present. Because you just shoot what you see, the images seem to jog deeper memories about what happened when you were there. It's a trippy sensation, and one I couldn't resist.

 From the Apple Watch to the Oculus Rift, a lot of new hardware released in the last couple of years has failed to deliver on its early hype. Spectacles are different. They're real, and they're spectacular.

Turning Your Vacation Photos Into Works of Art, from a NYT article by Stephanie Rosenbloom

Engineer Prints are lightweight prints used by architects. And engineer prints need not be formally framed. People stick them to their walls with washi tape, a crafting tape that comes in innumerable colors and prints; or they hang the prints using wood poster rails or skeleton clips. The engineer prints at Parabo Press are 4 feet by 3 feet, and cost $20 in black and white, and $25 in color

Fabric prints — not soft like a bedsheet, more like a place mat made of matte woven fabric —are another departure from a traditional photo enlargement. Order one from a site such as SnapBox and instead of framing it, you can peel and stick it on your wall.I ordered a 24x36 fabric poster for $34.99

Wood Prints from PhotoBarn, a family business that makes its products by hand in a "barn/warehouse" in Tennessee are $65 for an 8x12 board. PhotoBarn will also print your photos on canvas, burlap, and other wood products.

Scanning Services - Once you've turned the best of your travel photos into art, it's time to store the rest. For affordable bulk scans, ScanMyPhotos.com is an old standby. The company will scan about 1,800 photos at 300 dpi for $145 at its headquarters in Irvine.

Or you could buy a scanner and scan your photos yourself, perhaps doing a batch for half an hour each day, but the PhotoScan app by Google Photos is free and enables users to scan prints with a smartphone. These are not professional-quality scans.

SOUTH BAY APPLE MAC USER GROUP
P.O. BOX 432
REDONDO BEACH
CA 90277-0432

Join, Renew or Give a Gift of a
SBAMUG Membership!

For only $35/year you get:
• Monthly meeting program
• E-mail group help
• Monthly newsletter (We publish 11 issues per year!)
• Use our Wiki
• Free web space & e-mail on our server
• Build your own website
• Create your own blog
• Special merchant discounts
• $$$
• Occasional swaps, free software, raffles
  http://www.sbamug.com/join.html
  Or, contact Membership Chair
  CW Mitchell at
  cwmitchell@sbamug.com

SBAMUG Membership Application

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

Individual & family membership: $35/year payable to SBAMUG
☐ **New Member**   ☐ **Member Renewal**

Name:_____

Address:_____

City:_____ State:_____
Zip:_____
Phone: (_____)_____
Email
Address:_____

Special
interest:_____
Devices you use most:_____
How did you hear about
SBAMUG:_____
Comments:_____
_____
Signature:_____

Date: _____

Bring your Application and Fee to our General Meeting at Lomita Veteran's Hall, 1865 Lomita Blvd., Lomita.
Or Mail to: SBAMUG, PO Box 432, Redondo Beach, CA 90277-0432