

Orange Bytes Newsletter Page

Date: March 2014 Orange County, California

The Orange Bytes Newsletter is undergoing a change. As of this point in time, and for the foreseeable future, the 'Bytes will be composed as a web page, and be organized sort of like a multi-authored "column". While we await a new Editor, the Adobe PDF version will not be composed, printed, or mailed out. This page, like all other web pages, may be printed out if desired.

Articles for this page will be included which are submitted by Members at large. The Webmaster won't be in composing mode. Just send your composed input to the Webmaster with a note stating your name and a brief description of the article. This page will be archived at the end of each month, and then cleared. As new articles roll in they will be published each month. If you would like your article to span several months, please so indicate. The Webmaster reserves the right to monitor what gets published. Please contribute so the 'Bytes continues to live on.

Submissions should consist of a Word document; that way text and images may be easily included. Topics could range from event reports, book reviews, tutorials, product reviews, nicely composed boilerplate, etc., to even hard-hitting political or religious commentary. Ahhhh, skip those last two. But you get the idea.

Mobile Computing Ben Lichtenbergh, SIG Leader

The main topic in the February meeting was showing how to do a free full length movie on the big screen. Also were discussed, that because of losing in litigation, Microsoft has to change the name SkyDrive to OneDrive. That Lenovo bought Motorola Mobility from Google and the x86 Server business from IBM. We looked at overcoming the problems of putting MC SIG presentations on the Internet (SkyDrive) and demonstrated it by putting Steven Breitbart's BitCoin presentation on the Internet. We looked at, and talked about, an image of a bad email I received. We discussed several warning signs that should make it suspicious to anyone and therefor none clickable. This talk is somewhat outside the scope of mobile computing, but we do it once in a while, just to refresh our awareness about how to recognize some of the dangers of the connected world. We had a good laugh watching a video about hacking a BlackBerry phone (in a blender).

If you wish to be removed from the monthly MC SIG email, or know someone who wants to be added, please send the request to bal@msn.com. Make sure the subject line starts with NOCCC.

This SIG meets in Science 109 at 10:30 am.

From the Desk of the Membership Chairman By Ben Lichtenbergh, bal@msn.com

I'm sorry that no member apparently is willing to publish the Orange Bytes. We'll go on in some fashion on our website where our webmaster rblauter@cs.com will publish what we send him via email. The club had a nice run with its orange color covered newsletter, but all things have a beginning, a middle, and an end. This looks like the end.

Thank you Steven and Ted who edited the Orange Bytes these last few years.

Comments on Orange Bytes Newsletter Web Page – New Style Webmaster

The February Orange Bytes Newsletter PDF contains some articles for the month of February 2014, and some articles that pertain to January 2014, e.g. Main Meeting Report for January 5 and the Board Meeting Minutes for January 5. At or around the time the March 2014 Newsletter would come out, it was apparent there would be no further newsletters due to the absence of anyone to prepare it. So, an O.B. Newsletter Web Page was set up as an interim measure.

Since web pages don't have submission time dates or printing and mailing time dates, there could be a lot of overlap from one month to the next. So, why put a monthly date at the top of this page? Answer: To try and maintain some semblance to the printed O.B.Newsletter format. The Bytes may rise again.

Just to be clear, there will be a separation in the text here to denote the current month from the previous month. At some point in the current month, previous month articles will be deleted. At the end of a month, the current O.B.N. web page will be archived as a PDF file. Windows 7 seems to do this nicely, embedding images from the html web page directly into the PDF document. This has just been done and the file in the archives is named "bytes2014-FebMar.pdf" to show that it's not entirely one month or the other.

Articles from the previous month . . . For several days.

Changing the Exploring New Technologies SIG Steven Breitbart, NOCCC

We are changing the Exploring New Technologies SIG to the Interesting Technologies SIG. The premise of this SIG is that any NOCCC member can reserve a month to talk about any interesting technology they know about and feel would be good information for club members. It does not have to be directly related to computers nor does it have to be bleeding edge technology. Also, do not feel obligated to put on a 1½ hour presentation. Examples might be different types of Internet TV, Satellite TV or Robotics. It would be preferable to reserve a spot a few months ahead of the actual presentation. That way, the information will get out to the members via the club web site. To reserve a spot, contact Steven Breitbart at smbreitbart@gmail.com.

Linux SIG report for February 2, 2014
Subject: NOCCC Linux Group Wiki Redux
Presented by SIG leader Tommy Crenshaw
Written by Linux SIG Liaison Bob Palmer

More of the wonderful world of WIKI.

The Linux SIG Wiki page (still not much there) located at (note corrected listing, you don't need "www") linux.21phoenix.com. All SIG (and club) members who are interested in Linux are invited to visit, and contribute comments and suggestions on group topics. You might want to bookmark or favorite this page so you can watch it develop.

This month we spent time learning how to edit and format the page. We worked chiefly in the "sandbox" area, which is the area set aside for learning and experimenting so you can figure out how to format what you want to say in a presentable way. The sandbox is available to everyone who wants to develop their skills. Since we expect multiple visitors to the sandbox, we ask each visitor to NOT DELETE what someone else has written, but only ADD what you want to work on. You should only delete what you are finished with. Everyone is responsible for their own work. It is a good idea to spend time on the sandbox page.

We learned how to do things like italicizing text, bolding text, and underlining text and about where to look to find how to do various other things. Some of what we learned can now be seen in the improvements on the main page of the Wiki.

The template for this Wiki is fairly basic. This means you have to study the instructions a bit to be able to do some of the fancier things you may want to do. RTFM (Read the "Fine" Manual)! You old timers out there may know what the "F" really stands for. The editing information is supplied several places on the Wiki, and it is worth going over.

We are looking for ideas on topics for future SIG meetings, information about Linux in general and questions which we might be able to answer. We invite comments, but not flames.

It's a good idea, and if the group gets behind it, it could enhance our future meetings.

February 2, 2014 Main Meeting Report By Steven Breitbart, NOCCC

Club Business

Pres. Don Armstrong opened the meeting. He introduced a visitor, Sue Montelone. Don said that many of the things on the Consignment Table were donated by the family of late member Ed Koran. He also thanked Steven Breitbart for publishing the NOCCC Bylaws in the February 2014 Orange Bytes. He said we need a slate of officers and directors for the upcoming elections in June.

In the Random Access section of the meeting, Sue Montelone said that free classes are available at Santiago Canyon College. She handed out a flyer listing several classes. According to Tia Christian the Orange Library and Santa Ana College also have classes. Steven said that we should consider changing the Exploring New Technology SIG to Interesting Technology. The thought is that any member can reserve a month and talk about technology they know about. It doesn't need to be edge of the art technology, just interesting to our members.

After the speaker was done, Gerry conducted the raffle.

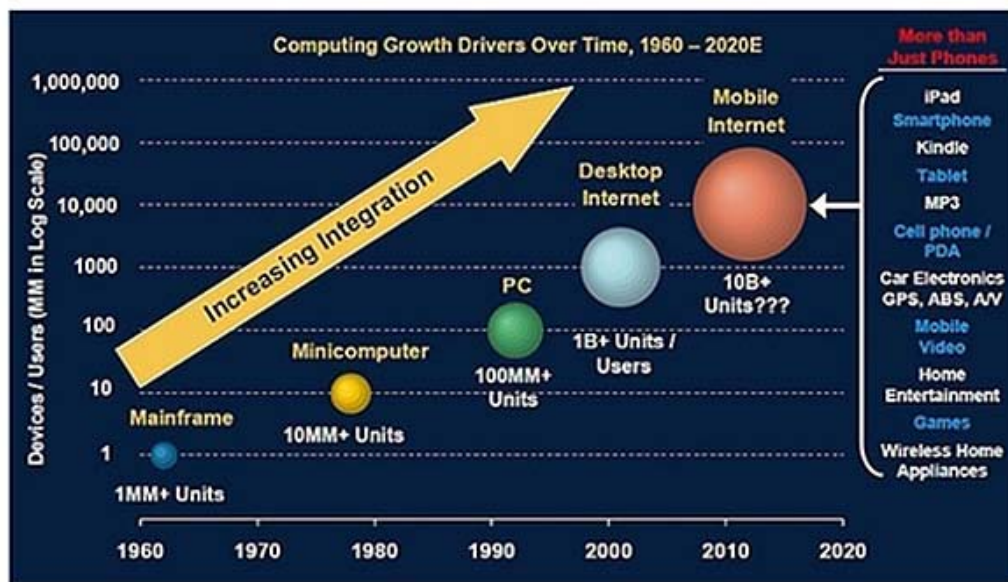
Main Meeting Speaker

Don introduced Alex Leipf, winner of the NOCCC scholarship for 2013. Alex has earned a Bachelor of Science in math from Chapman University and is currently working on his Master's Degree in computer science. A lot of Alex's presentation was about how we deal with extremely large amounts of data. The velocity of data generation and the amount of data gathering is increasing. Also the variety of data is more varied; we now have text, audio, video, images and GPS data. The recent NSA surveillance scandal shows the importance of data collection and the ability to analyze extremely large amounts of data. Alex mentioned several items that generate very large amounts of data. Drones used by military generate terabytes of data in one flight. Cars generate data. Facebook generates 500TB per day. A TV news story (not part of Alex's presentation) said that Twitter claims 500 million tweets are made per day and that they can't police them.

One slide said that 2.5 Exabytes ($\times 10^{18}$) of data is generated daily. That is equivalent to 20 billion filing cabinets worth of text. Even more incredible is that the amount doubles every 40 months. Cisco predicts that 1.4 Zetabytes ($\times 10^{21}$) will be generated in 2017. Another slide expressed the increasing rate of data generation and is included below.

As more companies demand more extensive analysis of larger data sets, computational sciences becomes more in demand. One of the tools used is R, which is a programming/forecasting tool for Time Series Analysis. Using higher levels of mathematics, it allows analysts to take a data set and more accurately fit a model to the data than a generic program such as Excel.

Growth of Data



Source: Internet Trends 2010 by Morgan Stanley

Alex also talked about the potential growth of the Internet. As of the second quarter of 2012, Internet penetration is highest in North America at 78.6%, lowest in Africa at 15.6%. At that time, 34% of the world's population used the Internet but growth of 50% is expected by 2017, equivalent to 3.6B people. A lot of the growth will be in mobile broadband. The developing world has had 2,375% growth in 5 years, but both fixed broadband and mobile broadband are growing all over the world. Alex described the Chapman University Computational Sciences department which was started in 2010 and has four concentrations available within the graduate program:

- Analytics and Applied Mathematics. One of the things they are doing is using the wii-mote to gather data in all three dimensions plus rotational data and acceleration information. By attaching this device to the pelvic area of children with neurological deficiencies which impairing normal walking, information can be acquired which can help treat the children.
- Bioinformatics and Computational Biology. One of their goals is to find genetic traits that lead to Alzheimer's disease based on a genome scan.
- Computational Economics. Alex is in this track. One of their projects is to test the hybrid auto market to figure out what leads to a strong selling model. Interior size and power are key factors and to determine how different features react with each other.
- Earth System Science. They are testing the accuracy of rainfall prediction and have found errors in current models.

Several fields have a high demand for people with this type of education. Several slides showed statistics that computer analyst jobs will experience large growth in the next several years. A 23% growth expected by 2022. U.S. News listed IT jobs as the top job in 2014. This is the first time the top job is not from the healthcare industry. The 2012 median salary was approximately \$90,000.

Alex is working for a company that makes recommendations to the auto manufacturers. However, there is so much data being generated that it needs to be examined and summarized to derive meaningful conclusions from it. Cars now have more than one CPU. Data collected may go to the auto manufacturer and/or insurance companies. Potentially, the insurance companies may increase your rates if they learn you have bad driving habits. Alex showed a slide of The Connected Car. At present, Tesla and Audi have connected cars. One slide mentioned telematics, which is the long distance transmission of computerized information. SIMs embedded in the vehicle are replacing smart phone connections. Apple and wireless providers are trying to compete with auto manufacturers for control of the future dashboard. Better selling cars are weighted heavier in the calculations that lead to recommendations.

Alex showed some advanced features that are appearing in cars now or will appear in the near future. They first appear in luxury cars and eventually work their way into less expensive cars. Some features are:

- Lane keeping assist. • Parking Assist • Bluetooth Connectivity
- Satellite Radio Connectivity • Cloud Connectivity • Collision Avoidance
- Active Cruise Control • Active Suspension • Attention Assist
- Pedestrian Detection • Heads Up Display • Adaptive Front-lighting Systems (AFS)

Another interesting meeting. See you next month!

Winners at February 2, 2014 NOCCC Meeting

General Raffle

Pat Wilkes – Wireless stereo headphones

Bob Dickson – NOCCC pen

Ben Lochtenbergh – Two 10' HDMI cables and 3 port switch

Steven Breitbart – LED book light

Rudy Lauterbach – Disk file

Members Only Raffle

Richard Miller – Mini tool set combo

Spiral Palmer – NOCCC Pen

Don Armstrong – Two 10' HDMI cables and 3 port switch

February 2, 2014 Raffle Winners *Photos by Jim Sanders, NOCCC*



Pat Wilkes (old photo)
Wireless Stereo Headphones



Bob Dickson
NOCCC Pen



Ben Lochtenbergh
*Two 10' HDMI Cable
and a 3-port Switch*



Steven Breitbart
LED book light



Rudy Lauterbach
Disk file



Richard Miller
Mini tool set combo



Spiral Palmer
NOCCC Pen



Don Armstrong
*Two 10' HDMI cables and a
3-port switch*

You could be a raffle winner!

- 1) Remember to bring \$1 or \$5 bills.***
- 2) Buy tickets - \$1 each or 6 for \$5!***
- 3) Get two General raffle tickets for a Lastinger Parking receipt!***
- 4) Get one Members Only ticket for wearing a NOCCC badge!***
- 5) Get another for wearing a NOCCC shirt!***