NEWS FROM COMPUTER SCIENCE AND ENGINEERING

Written by the Beta Team of CSESoc Produced by Wen Di LIM Edited by Tim WILEY, and Samuel POLLOCK.



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OPINION

Facebook - The Historian's Dream

I love facebook. It's great. It gathers information on people, collects data, pictures and videos, and collates all of this information in one place. It's currently the best available tool for stalkers.

And I don't mind at all.

Of course, I don't use facebook to stalk people. I love facebook because I'll be able to do that. in the future. And so will my children, and my children's children, and so on. It's like someone made a photo album for them, with almost zero effort on my behalf.

For example, I don't know much about my grandparents. I know even less about my great-grandparents. One step beyond that? Nothing. That's the limit of my family knowledge. I don't know their names, their history, or anything great they've done. This is why I love facebook. Remember that TV show "This is your life"? Everyone gets that now, for free. Places you've been, events you attended, photos and videos of your life, all there. Privacy can an issue, but given the trove of information, I'm not really that concerned.



I'm far more interested in what this information means for people in the future. Will it become a fad, to go through someone's Facebook during a funeral? You could see the highlights of someone's life, told through pictures and videos that they took themselves.

This raises another interesting point. In eighty to ninety years, everyone that you know on Facebook will be dead. Whats going to happen to their profiles? We've yet to go through a generation of people

who have used Facebook, so they haven't had to deal with this yet. Will all of the information remain, waiting to be found a used? I would love to be able to go through the profiles of my ancestors. If a historian or genealogist had access to all that now, it would be a dream come true. "Julius caesar: Just conquered Gaul, lol".

If all this has made you paranoid so far, there's no reason to be. Sure, all this information about you is out there. So what? Admittedly a stalker can get a lot of information about you. That's very creepy, But if a stalker is determined enough, they'd be able to do so anyway. And in the future people might be able to look you up and see all your embarrassing moments, but who cares? You're dead! Lets not forget the few billion other people out there, who also have their profiles available to be seen. You've probably got more reason to be worried about Zynga. If facebook was a historian's dream, then Zynga and its games are an economist's and sociologist's dream.

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OPINION

Facebook - The Historian's Dream cont.

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Then again, Facebook games could contain additional troves of information for historians. If you're the type to play Facebook games, people in the future will know not only what you've done, but how you would've done it. They'd know your betting habits from poker games; Your thesaurus (aka. how much you like to cheat) with scrabble games; Creativity from draw something; Logic from checkers and chess. The list goes on.

You've probably got more reason to be It's crazy how much information is being gathered about you. From your pop culture preferences, to your pop culture references. Your friends, your friendsof-friends, and honestly, the internet in general knows everything about you.

> And you know what? The people of the future are going to love it.

> > JEFFREY LAI

HISTORY

Evolution of Linux

Conception and childhood

Linux was created in 1991 by Linus Torvalds as a free and open source operating system. This was unlike the extremely successful and booming competitor of the time, Windows. From the beginning the Linux source code has been publically available. It has constantly been subject to criticism. This additionally has allowed for community bug-fixes and continual updates. Linux was originally developed for the Intel_x86 processor. It also derived its architecture from the UNIX model consisting of a low-level lightweight kernel, device drivers and userland commands/binaries.

The teenage years

As Linux approached it's teenage years, the community of Linux became very large. Given the large community

various groups wished to take the project in different directions. This led to many variants including the four main distributions: Debian, Red Hat Enterprise Linux, Mandriva and Arch. Debian went on to become the most popular distribution largely due to Ubuntu.

Linux found it's place in the computing world as a great development platform due to it's customizability and active It also arose as the community. main choice of operating system for mainframe computers servers. supercomputers. Linux was chosen because it was open source, has a heavy emphasis on security and supported of dozens of programming languages.

Adulthood

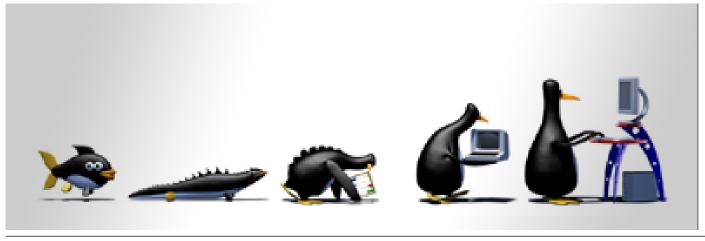
Linux has made great leaps forward in

terms of its popularity and usage. In 2012, mainstream games began to make appearances on Linux through the Steam network as Valve sought to move into a platform that was far less restrictive compared to Microsofts app store. Games such as Team Fortress 2 and Left 4 Dead 2 are now available and it has been stated that the future of gaming is with Linux.

By the beginning of 2013, Linux through Ubuntu, has been deployed in the tablet and smartphone markets. Google even based the Android kernel on the Linux kernel.

Where will the operating system will be seen in the future? Only time and community ingenuity will tell.

VINCENT TRAN



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RESEARCH

A Taste of Research

Working on cutting-edge research projects over Summer

Over the summer I took part in the Taste of Research program. The program is run by the Faculty of Engineering to give undergraduate students a taste of, well, research. Students from any school in Engineering can take part, and each school offers a wide range of different topics.

For 12 weeks over the summer break, participants decide on a project, conduct experiments, gather results and solve problems related to their chosen research topic. The program is culminated by an evening in the Tyree building where students present their research in the form of posters.

Some of the topics offered to CSE students last year included robotics,

games, operating systems and compilers. I was working in the Robolab, investigating the use of a domain specific language for specifying robot behaviour.

I found that I spent a lot of time deciding on a project. The "Robot Soccer" topic which I chose is very open ended, and I wanted to do a project that would both benefit rUNSWift (UNSW's robot soccer team) as well as make an interesting poster. I spent the first several weeks of my taste of research hopping between different projects before finally settling on one. I spent most of my time reading papers, learning the existing rUNSWift codebase, and writing test programs.

Taste of research is a sizeable time

commitment. You are expected to treat it as a full-time summer job. You also get paid a scholarship of \$479 per week. There are also cash prizes if you win the poster competition at the poster presentation evening.

I learnt a lot during my taste of research, both about robotics and the research industry in general. I recommend to anybody considering a research career or a postgraduate degree to take part. Any second or third year students may apply. Applications for 2013/14 are not yet open, but keep an eye on your inbox for more information.

STEPHEN SHERRATT

News in Brief

Pope pope = new Pope()

A new Pope was elected by the College of Cardinal on Monday. The Argentine Pope Francis replaces Pope Benedict XVI after he resigned from the job in February. I would make a Catholic joke, but they're already in mass.

Galaxy's New Shoes

After much hype and rumour, Samsung have finally revealed details of the new Samsung Galaxy S flagship phone. The Galaxy S4, while being the same size as the S3, contains a new 1920x1080 screen and various new Samsung technologies such as eye-tracking and gesture control. At least its physical size doesnt match its name.

Google Closes the Book

Google have recently announced that they're powering down and retiring Google Reader. The announcement has been met with a lot of controversy, as it was cited that usage of Google Reader has declined. The actual date of retirement will be July 1, 2013. Just dont rely on your RSS reader for the news when the date comes.



(Un)SimCity

SimCity was released on March 7th to pitchforks and flames. Branded "the worst [video game] launch in recent history", SimCity proved to be a PR disaster for EA. The problem stemmed from EA's always-online DRM, which required EA to provide servers for players to log into. However these servers were ill equipped to deal with the sudden influx of gamers. EA and Maxis have since apologised for the disaster, and offered a free game to anyone who had to go through the bloodshed. Note to self: Before releasing my game, simulate cities of people it.



Whats in the Box?

Last week Hardware maker Xi3 started taking pre-orders for the first so-called "Steam Box", the Piston, which they unveiled at CES. Valve quickly came out to the schoolyard to say "na-ah, thats no steam-box", to which Xi3 retorted "yeah it is, you gave us money to make it". Regardless, the system which is less powerful than my grandmother's computer, will according to Xi3 still run Steam games because it is, wait for it, a computer.

PATRICK CHUNG

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CSE SOCIETY & EVENTS

Installfest Debrief

Last Saturday CSESoc held their biannual Installfest. Over 40 students attended the event and many others helped out on the day. This year we offered students a choice of which operating system they would like to have installed. They could choose between Ubuntu, Lubuntu for Netbooks, or Mint (Mate/Cinnamon). We chose to offer Mint due to the graphical interface being similar to XP, providing familiarity for those moving from Windows to Linux. Windows 8, with the UEFI framework has also made it almost impossible to install Linux on the machine. Instead we offered to install a virtual machine, plus the necessary tools so they could use Windows to complete university work from home.



For those who just attended the Installfest and now have a distribution of Linux sitting on your computer, we greatly recommend attending the Linux workshop on Tuesday. Details are provided in the events section. Thanks to all those who volunteered their time to help out on the day.

Pierre Estephan

CSE SOCIETY & EVENTS

Cardboard Night Debrief

Our first cardboard night of the year was held on a Wednesday of Week 1 in the seminar room. Despite pizza not arriving until past 9pm, the atmosphere that was generated was a perfect kickoff to the start of a semester - people were talking, laughing, joking and competitively yelling at each other to make a move.

This year there was a move away from standard board games, with people exploring more interesting games like Munchkin Foo. Needless to say this opportunity to be a downright jerk to friends was not wasted. Game play was further facilitated by helpful people who actually knew how to play the games - a hats off to them for stopping us from making many illegal moves and answering our many questions.

Attendance was high as well - there was a group of people playing on the floor in the seminar room and a couple more groups had spilled out into the corridor. Not having a seat did not detract anyone from having an awesome time; it can be said that the people on the ground were making as much noise as those that were on furniture.

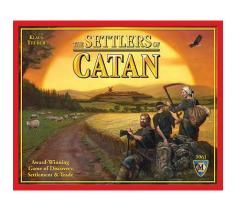
All in all it was a great evening, and a great thanks to evey one who donated their games and time towards the night.

WEN DI LIM









OPINION

You know what really gets my bits in a bunch?







never buy an apple computer. Ideally, an operating system is supposed to make your use of your computer as clear, easy and efficient as possible. Aesthetics are of secondary importance, or at least they should be.

When people are in the store looking at a Macbook's windows flying all over the place with super silky smooth animations and effects, their first reaction is something along the lines of, "What is this sorcery?! This is the greatest invention of all mankind! Please, take my hard earned dollars in exchange for this cosmic mystery!"

What they fail to realise is how much time they waste staring blankly at all these animations while they wait for their computer to actually do something. After a week of use, the wow factor dies down, and users are oblivious to the extra power and time they're consuming. Not acceptable.

"Blasphemy!" I hear you cry, "OSX is so intuitive and easy to use! That more than makes up for this minor detail!"

Intuitive my ass. Let's talk about window management.

OSX is the very reason why you should Let's say I want to maximise a window. I click that green button with the plus sign on it, which will make the window as big as possible, right? Nope. How exactly the window is "maximised" varies from application to application, so it does something largely unpredictable and often. It can even make the damn window smaller. Unhelpful.

> But what about fullscreen mode? That fills the whole screen, right? Surprisingly yes, and also hides absolutely everything else, like the dock and the status bar. Lets not forget that the fullscreen button has disappeared. Have fun figuring out how the hell to get out of there.

> Now let's say you've just bought your super shiny and super pricy retina display Macbook. Lets say you want to use all that pixel real estate you just bought to view a web page and a word processor at the same time. It's time to put two windows side by side! About 40 seconds later you've successfully moved, resized and moved and resized the windows again into a position you're sort of happy with.Meanwhile you struggle with the fact that you can only resize a window by grabbing it in the bottom right corner, which may or may not be off the screen at any time.

That is the point where you sit down, sigh gently, and think about all the better things you could've done with those 40 seconds of your life.

"But Mission Control! It's so good! I swoop my fingers, then my windows swoop around, and I can click the one I want! Intuitive!"

So I'll admit this part is not too bad. At least if all your windows were visually distinguishable and you didn't have a buttload of applications open.

Then again, one good part does not a good interface make. Just, for fun, try switching between the windows of the same application. Cmd + Tab? Nope. That switches entire applications. You have to use the "ultra-intuitive" shortcut of Cmd + Shift + . Meanwhile my fingers have broken from the contortion.

I could go on and talk about other atrocities such as Launchpad but I think you may grow tired. Perhaps I'll leave it for another time.

TL;DR: Using OSX is about as fun as repeatedly ramming your face into a box of razor blades.

LUKE TSEKOURAS

ANNOUNCEMENT

Beta Wants You!

Beta is looking for people to contribute articles, images, puzzles or random facts.

There are many different parts to your weekly newsletter; in addition to articles each of our sections requires research, writing and proof-reading. Heres how you can help:

If you find some news throughout the week that is interesting, email us the link.

csesoc.beta@cse.unsw.edu.au

See any really cool pictures lately or take Nows your chance - email us. one yourself?

Send it to us.

csesoc.beta@cse.unsw.edu.au

Do you like coming up with puzzles or know of a really interesting one?

Let us know.

csesoc.beta@cse.unsw.edu.au

Ever wanted to write an article?

csesoc.beta@cse.unsw.edu.au



Overheard

We ran out of what?

At the week 1 BBQ

Guy 1: I never thought I'd ever say it, but CSESoc has run out of sausage!

Guy 2: Yeah, we're running out, but don't worry, we're getting more in a minute. Wait for it...

Guy 2: Oh... I see what you did there.

We like Google because...

At the career's fair

Girl: I'm only here because of the tablet draw. And stickers. And chapstick. Look! I got a Google chapstick! It's amazing!

The Glasses dilemma

Guy: Conceptually, Google glasses are awesome. Which is why liking it means you're cool. However, wearing them just makes you a dork.

You Derped on this one Google

Guy: They are shutting Google reader How am I supposed to down? procrastinate in an organised fashion any more?

THE BETA TEAM

XKCD Comics



THERE ARE NO WORDS. YOU'RE NOT READING. THERE'S NO STORY THERE.

MAYBE NOT FOR YOU. WHEN I LOOK AT THOSE BOOKS, I THINK ABOUT ALL KINDS OF STORIES.



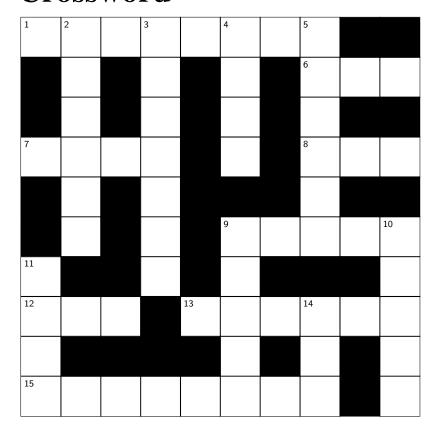
READING IS ABOUT MORE THAN WHAT'S ON THE PAGE. HOLDING A BOOK PROMPTS MY MIND TO ENRICH ITSELF. FRANKLY, I SUSPECT THE BOOK ISN'T EVEN NECESSARY.



THE WHOLE INDUSTRY IS EVIL. GREEDY PUBLISHERS AND RICH AUTHORS TRY TO CONVINCE US OUR BRAINS NEED THEIR WORDS. BUT I REFUSE TO BE A SUCKER. WHO SOLD YOU ALL THESE Blank Books?

ENTERTAINMENT

Crossword



Across

- 1. Beta Head (3,2,3)
- 6. Language named after 15 Acc
- 7. Verbose, widely used programming language
- 8. Highly extensible scripting language
- 9. Language primarily used in business
- 12. End of File (Abbr.)
- 13. Small interpreted program
- 15. The first computer programmer

Down

- 2. Ericsson functional language
- 3. Type system
- 4. Language famous for turtles
- 5. Popular matrix based language
- 9. Apple API
- 10. Language used to typeset this crossword
- 11. Popular language for string parsing
- 14. Used to assist development (Abbr.)

OSWYN BRENT

ENTERTAINMENT

Puzzlers

- 1. Two bridges A & B across a straight river are 1km apart. Bob is in a boat and leaves bridge A heading upstream. As Bob passed under bridge B, his hat falls into the river. 15 minutes later Bob notices his hat is missing and immedi-ately turns his boat around. By the time Bob reaches his hat, he is at bridge A again. How fast is the river flowing?
- 2. There are 3 black hats and 2 white hats in a box. Three men (we will call them A, B, & C) each reach into the box and place one of the hats on his own head. They cannot see what color hat they have chosen. The men are situated in a way that A can see the hats on B & C's heads, B can only see the hat on C's head and C cannot see any hats. When A is asked if he knows the color of the hat he is wearing, he says no. When B is asked if he knows the color of the hat he is wearing he says no. When C is asked if he knows the color

of the hat he is wearing he says yes and he is correct. What color is C's hat and how can this be?

- 3. Take the number 4, use it 3 times, and write a mathematical expression that will give you the number 55.
- 4. Assuming traditional relationships, what is the smallest group of people required that contain all of the following family relationships: Aunt, Brother, Cousin, Daughter, Father, Mother, Nephew, Niece, Sister, Son and Uncle.
- 5. A lost and hungry vagabond happened upon a pair of travelers one of whom had three loaves of bread while the other had five. All of the loaves were the same size and weight.

The two travelers decided to share their bread with the vagabond, and that the eight loaves should be shared equally among the three of them. When they had finished, the vagabond reached into his pocket and pulled out eight coins. He handed three coins to the traveler who had had the three loaves and five to the other one and disappeared into the inky shadows.

The next morning, right after no breakfast, the one who had received the three coins said to the other one, 'I don't think he should have given three coins to me and five to you. It's not fair.' And he was right. How should the coins have been split up?

Email your solutions to: beta.puzzles@cse.unsw.edu.au

THE BETA TEAM

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CSESOC EVENTS & SOCIETIES

Upcoming Events

CSESoc Weekly BBQ

Every Monday, 12:30pm - 1:30pm

Physics Lawn

FREE FOOD! Same time, same location, we will be there no matter rain or shine.

Tech Essentials Workshop

Tuesday 19th April, 3:30pm - 5.30pm

K17 Seminary Room

Get an introduction to many useful tools including Linux, Git, and Networking tools.

CSERevue BBQ

Thursday, 21st March, 12:30pm - 1:30pm

Globe Lawn

Next week, we'll be holding another BBQ at lunch time! If you're a member, come along and enjoy a free sausage! You can even sign up on the spot to get your lunch.

CSERevue Dance Block

Thursday, 21st March, 4 - 6pm

Wurth Drawing Room, Roundhouse

Come along and learn some club-worthy moves!

This dance block will focus on learning some techniques of hip-hop dancing, rather than just learning a coreo to a song.

ENGSoc PwC WorkShop

Monday, 25th March,, 12pm - 2pm

Club Bar, Round House

Recent engineering graduates and the head of campus recruitment from PwC are coming to UNSW to share their awesome experiences, tips and the endless opportunities within the company. Free food and drinks will be provided!!

Google App Engine CodeLab

Tuesday March 26th, 6:30pm - 8:30pm

Google Sydney Office; 48 Pirrama Road, Pyrmont

Join Google engineers for a hands on tour of app engine! Tour the Google office! Win prizes! Free Pizza!

ENGSoc BBQ

Wednesday, 27th March, 12pm - 2pm

Physics Lawn

ENGSoc is having a free BBQ too!

CSESoc Rock Climing

Tuesday, 2nd April, 11am

Sydney Indoor Climbing Gym. 4C/1-7 Unwins Bridge Rd, St

Peters. Prices: TBA

It has been scientifically proven that rock climbing makes you 300% more badass, and as a faculty we are slightly short on badassery, in light of this we're going rock climbing in the mid semester break!

CSESOC AND CSEREVUE SOCIAL TEAM

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