>PC Update

February 2020

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Monthly Meeting Live Stream from 7.00pm on Wednesday 5th February 2020 at http://tv.melbpc.org.au

Please remember to always bring your membership card to meetings

SIG Listings and up to date calendar are available on our homepage

Editorial February 2020
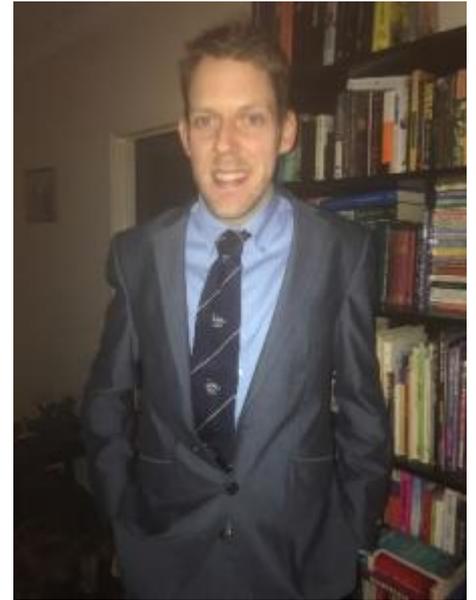
Hugh Macdonald

Hello all,

Welcome to the first edition of PC Update for 2020. I hope you had a relaxing holiday period and 2020 has got off to a good start for you.

We've got another great edition of the magazine for you this month. There are articles on social media, nanobots, Windows 10 taskbar tips and how to make your tech fit into your home. There's also the regular features including the President's Report, Book Reviews and SIG reports. Also look out for What's New At The Club.

Assistance Required

While PC Update is fortunate to have a number of very reliable regular contributors, and I thank them greatly for their contributions, I'd love to get a few more members contributing regularly. The kind of topics I'd love to feature more of are reviews of open source software, reviews of any new tech you've acquired such as microcontrollers, laptops, tablets, smartphones or cameras, as well as any hints or tips on using technology. If you've got anything to contribute along those lines, please get in touch with me at editorpc@melbpc.org.au.

Have a great month!

From The President February 2020
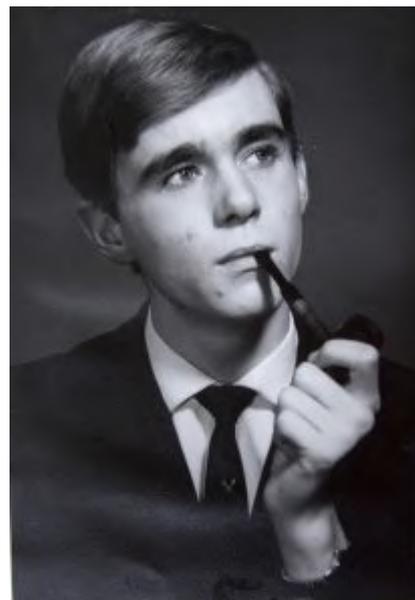
David Stonier-Gibson

Is the club dying?

On a Sunday a few weeks ago Steve Zuluaga, Hugh Macdonald and I were at the club, and spent a few hours with one newly joined member and two sure-to-join candidates. They are all under 40, one maybe a bit older.

Also on that Sunday the Melbourne Computer Club FaceBook page acquired a sudden rush of *Likes.* In the currency of FaceBook that is a Big Deal. This was a direct result of publicising Coder Dojo on FaceBook (more on that below).

Our member count is currently fairly stable at around 1600. That is in contrast to a few years ago when we were losing members at quite a rate. New memberships are roughly half and half young people and more "mature" people, some of whom are re-joining after an absence.

Two days earlier an email was received from a member complaining because we had put out a notice that we want to move the cupboards out of the training room and get rid of any "stranded assets" (aka old junk nobody ever looks at), as part of the re-purposing of that space.

Never allowing anything to change is called stasis. Stasis leads to death. This committee not going to let that happen.

So no, the club is not dying. It is going to change, and your committee is committed to doing our best to help it survive, and thrive, by transforming it into a technology club for the 3rd decade of the 21st century. Inevitably we will step on some toes, though hopefully lightly. Inevitably some people will object to *any* change. But change we must. As far as possible we will consult with stakeholders and find, for example, alternative spaces and resources for their activities.

Training room

Steve Zuluaga, Rob Brown, Paul Hattam, Aavon Fernando Dave Williams and Aiden Kelly (new member from my first paragraph above) have all been putting an amazing effort into the training room. They have opened up the wall to the atrium to let in daylight and are building shelves and cupboards into the newly exposed bay windows. The complaining member mentioned above also complained about that, because

the room is used for 8mm movie to DVD transfer as it (factually inaccurate) "is (was) the only room that can be blacked out".

A vision is evolving of what that room can eventually look like with 3D printers, electronics work areas, CNC router, work benches and storage spaces. And natural light! Eventually it will become the *Maker Room*. AKA New Member Magnet.

Coder Dojo

Coder Dojo is a movement that introduces kids 7-17 to computer programming and related STEM (Science, Technology, Engineering, and Mathematics) topics in a fun environment. Steve Zuluaga is well advanced with organising a [Coder Dojo](#) in the club, working in collaboration with the established dojo movement. This will bring up to 15 new parents (potential members) and children into our club rooms, though hopefully some members will also join in. I will be participating with my grandson. It has already been advertised on Yammer and FaceBook. There will be fortnightly dojo sessions on Saturdays during school terms. Please visit the web page and enrol with your child or grandchild. https://melcc.org.au/coderdojo

3D Printing

I have an understanding with a local 3D printer importer/reseller. They will supply printers for the upcoming 3D printing workshop. In return we will "allow" them to leave the printers in our club rooms and bring in potential buyers to see them. Some of those printers we will be able to use as if they are our own; I hope to negotiate a deal whereby they do eventually become ours. This is a double win-win for us and for them.

The half day workshop will most likely be on 22nd February. That's a Saturday in between dojos. The event has a web page. https://melcc.org.au/introduction-to-3d-printing-2002.

Emergency Automatic Defibrillator (AED)

Paul Hattam is arranging the purchase and installation of an AED at Moorabbin, which will hopefully be in place by the February monthly meeting. Reminder: an AED saved a Wiggle's life recently.

Borret room

Anyone coming in to Moorabbin will notice we are experimenting with various furniture arrangements in the main room. The computers from the training room are parked in there while the training room is re-modelled. They will probably stay – the desks are all getting castors to simplify re-arranging the spaces. We are also aiming to make the room more sociable by arranging chairs around tables in preference to "theatre rows", although this has met with some confusion and push-back.

February Monthly Meeting

The December Monthly Meeting will be held Wednesday December 4 at 7pm.

Guest Speaker: Dr Alasdair McAndrew

Our guest speaker is Dr Alasdair McAndrew. His topic is "Modelling complexity with very simple rules". This brief talk will demonstrate how to start with a few letters, apply some simple rules repeatedly, to produce graphics of stunning complexity. The talk will display a few examples and applications such as modelling plant growth and generating fractals. No coding or mathematical knowledge will be assumed. If you have ever marvelled at the complexity of the branches of a tree, or the stars in the night sky, then you will have all the prior knowledge required!

Associate Professor Alasdair McAndrew is the Director of Learning & Teaching in the College of Engineering and Science at Victoria University; and a mathematics educator (and occasional mathematician) with a particular interest in mathematics technology.

In-house Speaker: Lynette Hammet

Our member speaker is Lynnette Hammet, who will be describing her experiences with a particular brand of "device" (Phone, tablet, etc).

Meeting Agenda

7.00pm sharp: Meeting opens. MC is Peter Bacon

Guest speaker: Dr Alasdair McAndrew

President's Report: David Stonier-Gibson

Social break

Q and A with George Skarbek

In-house speaker: Lynette Hammet

What's New? with George Skarbek

9.30pm: Close

This month we will be offering the purchasing of cofee and tea online, as part of a trial of CiviCRM to take one off payments in preparation for upcoming club events that we're planning to offer. If you'd like to pre-purchase your coffee or tea prior to the meeting, please click here to do so.

Please remember your membership card or a photo of your QR code on your phone

The meeting is streamed live online at https://tv.melbpc.org.au

Don't forget, directly after the meeting WAFFLE SIG at Fong's Chinese restaurant in Bentleigh. This is a totally social gathering where you can enjoy a snack, a full meal or just a cup of coffee. Sketch maps at the meeting or use Google Maps
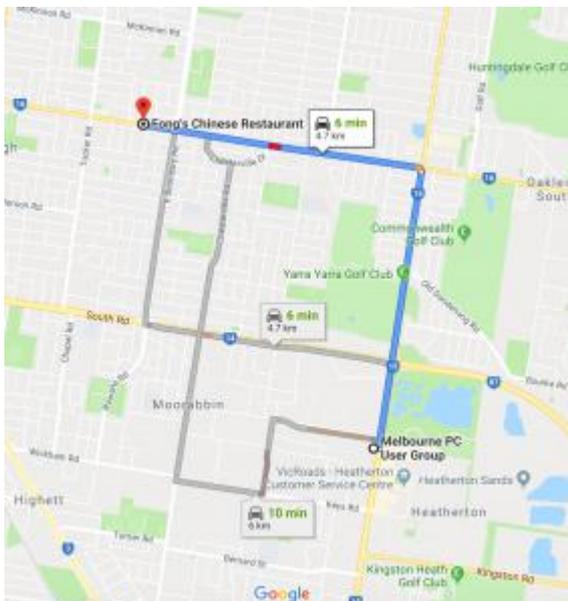
Club News February 2020

Hugh Macdonald

Training Room

The revamp of the training room began in July 2019 when all members were invited to a meeting to discuss the future use of the room.

Based on discussions held at the meeting, it was decided that a number of changes would be made to the room. These were firstly the removal of electrical cabling and data cabling from the wall that is adjacent to the atrium, and secondly, the partial removal of the wall to expose the windows behind it, and thirdly, the relocation of the training room computers to the Borrett Room.

Committee approval was received for pendant style electrical and data cabling to be installed in the room to replace the cabling that was lost from the exposed wall. Commitee approval was also received for the wall to be exposed.

Work began on the room in December 2019 with the installation of the pendant style cabling and continued in January 2020 with the partial removal of the wall which has exposed the windows to the atrium behind it.

Work is set to continue on the revamp of this room, with the manufacture and setup of desks that will be

much more conducive to electrical and mechanical work on microcontrollers and other maker parts that members may wish to produce.

If you haven't visited the club lately, make sure you check out the room next time you visit.

Coder Dojo

Coder Dojo is a new initiative at the club.

It's a worldwide initiative to create spaces for people aged seven to seventeen to engage in their passion for programming, microcontrollers, robotics and web design.

The club has recently launched the South East Melbourne Coder Dojo and the first session took place on Saturday, February 1 2020.

If you've got a ninja at home (someone aged seven to seventeen) who might be interested in taking part, then please head to http://www.melcc.org.au/coderdojo to register.

[Not bot, not beast: scientists create first ever living, programmable organism](#)

[Simon Coghlan](#), *[University of Melbourne](#)* and [Kobi Leins](#), *[University of Melbourne](#)*

A remarkable combination of artificial intelligence (AI) and biology has produced the world's first "living robots".

This week, a research team of roboticists and scientists [published](#) their recipe for making a new lifeform called xenobots from stem cells. The term "xeno" comes from the frog cells (*Xenopus laevis*) used to make them.

One of the researchers [described the creation](#) as "neither a traditional robot nor a known species of animal", but a "new class of artifact: a living, programmable organism".

Xenobots are less than 1mm long and made of 500-1000 living cells. They have various simple shapes, including some with squat "legs". They can propel themselves in linear or circular directions, join together to act collectively, and move small objects. Using their own cellular energy, they can live up to 10 days.

While these "reconfigurable biomachines" could vastly improve human, animal, and environmental health, they raise legal and ethical concerns.

Strange new 'creature'

To make xenobots, the research team used a supercomputer to test thousands of random designs of simple living things that could perform certain tasks.

The computer was programmed with an AI "evolutionary algorithm" to predict which organisms would likely display useful tasks, such as moving towards a target.

After the selection of the most promising designs, the scientists attempted to replicate the virtual models with frog skin or heart cells, which were manually joined using microsurgery tools. The heart cells in these bespoke assemblies contract and relax, giving the organisms motion.

The creation of xenobots is groundbreaking.

Despite being described as "programmable living robots", they are actually completely organic and made of living tissue. The term "robot" has been used because xenobots can be configured into different forms and shapes, and "programmed" to target certain objects – which they then unwittingly seek.

They can also repair themselves after being damaged.

Possible applications

Xenobots may have great value.

Some speculate they could be used to clean our polluted oceans by collecting microplastics.

Similarly, they may be used to enter confined or dangerous areas to scavenge toxins or radioactive materials.

Xenobots designed with carefully shaped "pouches" might be able to carry drugs into human bodies.

Future versions may be built from a patient's own cells to repair tissue or target cancers. Being biodegradable, xenobots would have an edge on technologies made of plastic or metal.

Further development of biological "robots" could accelerate our understanding of living and robotic systems. Life is incredibly complex, so manipulating living things could reveal some of life's mysteries — and improve our use of AI.

Legal and ethical questions

Conversely, xenobots raise legal and ethical concerns. In the same way they could help target cancers, they could also be used to hijack life functions for malevolent purposes.

Some argue artificially making living things is unnatural, hubristic, or involves "playing God".

A more compelling concern is that of unintended or malicious use, as we have seen with technologies in fields including nuclear physics, chemistry, biology and AI.

For instance, xenobots might be used for hostile biological purposes prohibited under international law.

More advanced future xenobots, especially ones that live longer and reproduce, could potentially "malfunction" and go rogue, and out-compete other species.

For complex tasks, xenobots may need sensory and nervous systems, possibly resulting in their sentience. A sentient programmed organism would raise additional ethical questions. Last year, the revival of a disembodied pig brain elicited concerns about different species' suffering.

Managing risks

The xenobot's creators have rightly acknowledged the need for discussion around the ethics of their creation.

The 2018 scandal over using CRISPR (which allows the introduction of genes into an organism) may provide an instructive lesson here. While the experiment's goal was to reduce the susceptibility of twin baby girls to HIV-AIDS, associated risks caused ethical dismay. The scientist in question is in prison.

When CRISPR became widely available, some experts called for a moratorium on heritable genome editing. Others argued the benefits outweighed the risks.

While each new technology should be considered impartially and based on its merits, giving life to xenobots raises certain significant questions:

1. Should xenobots have biological kill-switches in case they go rogue?
2. Who should decide who can access and control them?
3. What if "homemade" xenobots become possible? Should there be a moratorium until regulatory frameworks are established? How much regulation is required?

Lessons learned in the past from advances in other areas of science could help manage future risks, while reaping the possible benefits.

Long road here, long road ahead

The creation of xenobots had various biological and robotic precedents. Genetic engineering has created genetically modified mice that become fluorescent in UV light.

Designer microbes can produce drugs and food ingredients that may eventually replace animal

agriculture.

In 2012, scientists created an artificial jellyfish called a "medusoid" from rat cells.

Robotics is also flourishing.

Nanobots can monitor people's blood sugar levels and may eventually be able to clear clogged arteries.

Robots can incorporate living matter, which we witnessed when engineers and biologists created a sting-ray robot powered by light-activated cells.

In the coming years, we are sure to see more creations like xenobots that evoke both wonder and due concern. And when we do, it is important we remain both open-minded and critical.

Does social media make us more or less lonely? Depends on how you use it

Roger Patulny, *University of Wollongong*

Humans are more connected to each other than ever, thanks to smartphones, the web and social media. At the same time, loneliness is a huge and growing social problem.

Why is this so? Research shows social media use alone can't cure loneliness – but it can be a tool to build and strengthen our genuine connections with others, which are important for a happy life.

To understand why this is the case, we need to understand more about loneliness, its harmful impact, and what this has to do with social media.

The scale of loneliness

There is great concern about a loneliness epidemic in Australia. In the 2018 Australian Loneliness Report, more than one-quarter of survey participants reported feeling lonely three or more days a week.

Studies have linked loneliness to early mortality, increased cardio-vascular disease, poor mental health and depression, suicide, and increased social and health care costs.

But how does this relate to social media?

More and more Australians are becoming physically isolated. My previous research demonstrated that face-to-face contact in Australia is declining, and this is accompanied by a rise in technology-enabled communication.

Enter social media, which for many is serving as a replacement for physical connection. Social media influences nearly all relationships now.

Navigating the physical/digital interface

While there is evidence of more loneliness among heavy social media users, there is also evidence suggesting social media use decreases loneliness among highly social people.

How do we explain such apparent contradictions, wherein both the most and least lonely people are heavy social media users?

Research reveals social media is most effective in tackling loneliness when it is used to enhance existing relationships, or forge new meaningful connections. On the other hand, it is counterproductive if used as a substitute for real-life social interaction.

Thus, it is not social media itself, but the way we integrate it into our existing lives which impacts loneliness.

I wandered lonely in the cloud

While social media's implications for loneliness can be positive, they can also be contradictory.

Tech-industry enthusiasts highlight social media's benefits, such as how it offers easy, algorithimically-

enhanced connection to anyone, anywhere in the world, at any time. But this argument often ignores the *quality* of these connections.

Psychologist Robert Weiss makes a distinction between "social loneliness" – a lack of contact with others – and "emotional loneliness", which can persist regardless of how many "connections" you have, especially if they do not provide support, affirm identity and create feelings of belonging.

Without close, physical connections, shallow virtual friendships can do little to alleviate emotional loneliness. And there is reason to think many online connections are just that.

Evidence from past literature has associated heavy social media use with increased loneliness. This may be because online spaces are often oriented to performance, status, exaggerating favourable qualities (such as by posting only "happy" content and likes), and frowning on expressions of loneliness.

On the other hand, social media plays a vital role in helping us stay connected with friends over long distances, and organise catch-ups. Video conferencing can facilitate "meetings" when physically meeting is impractical.

Platforms like Facebook and Instagram can be used to engage with new people who may turn into real friends later on. Similarly, sites like Meetup can help us find local groups of people whose interests and activities align with our own.

And while face-to-face contact remains the best way to help reduce loneliness, help can sometimes be found through online support groups.

Why so lonely?

There are several likely reasons for our great physical disconnection and loneliness.

We've replaced the 20th century idea of stable, permanent careers spanning decades with flexible employment and gig work. This prompts regular relocation for work, which results in disconnection from family and friends.

The way we build McMansions (large, multi-room houses) and sprawl our suburbs is often antisocial, with little thought given to developing vibrant, walkable social centres.

Single-person households are expected to increase from about 2.1 million in 2011 to almost 3.4 million in 2036.

All of the above means the way we *manage* loneliness is changing.

In our book, my co-authors and I argue people manage their feelings differently than in the past. Living far from friends and family, isolated individuals often deal with negative emotions alone, through therapy, or through connecting online with whoever may be available.

Social media use is pervasive, so the least we can do is bend it in a way that facilitates our real-life need to belong.

It is a tool that should work for us, not the other way around. Perhaps, once we achieve this, we can expect to live in a world that is a bit less lonely.

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Windows 10 Taskbar Options

Jim Sanders, Director / Webmaster, North Orange County Computer Club, CA

The taskbar is a very important part of the Windows 10 operating system. Arguably, it's primary purpose is to make computing life for you, the user, easier. Like a lot of things in Windows 10, most of the features in the taskbar can be implemented or modified in more than one way. Some, directly on the taskbar itself. For instance, the order in which shortcut icons appear on the left end of the taskbar can be rearranged by simply moving the cursor to that icon, left click and hold with the mouse, then drag the icon left or right to the position that you want it to be in.

The taskbar is a great location for any shortcuts that you use often. One way to get that shortcut onto the taskbar is to right-click on any shortcut icon on the desktop and choose "pin to taskbar" from the list of options in the window that pops up. Or, click on start, pick the program that you want from the list that you can scroll through, right-click on that program, in the window that pops up, left click on "more" and on the sub-window that pops up, click on Pin to taskbar. If a program shortcut icon has already been pinned to the taskbar, you can "unpin it" in the same procedures.

One feature that some people love and others hate, is auto hide the taskbar. When the taskbar is at the default bottom of the screen location, and auto hide is turned off, the taskbar is always visible and covers up at least one line of information at the bottom of the screen. When auto hide is turned on, the taskbar is hidden until you move the mouse cursor to the bottom edge of the screen. At that point the taskbar rises to visibility. I happen to prefer that setting.

One taskbar function that few people seem to be aware of, assuming "Lock the Taskbar" is not checked, is that by simply moving the mouse cursor to the top edge of the taskbar a double headed arrow appears. With the double headed arrow visible, a left click and hold will allow you to move your arrow up and increase the number of lines that the taskbar covers, to half the screen if you want, or vice versa. Increasing the height of the taskbar allows you to have more of the larger icons that are easier to read.

The taskbar incorporates a large number of functions that could make your computing life easier if you studied up a bit on all the things that it can do. When you right-click on the taskbar, the first item on the window that pops up, at the bottom, is taskbar settings. It is recommended that you click on that and read all of the possible variations that the settings screen allows you to make. In particular, the section on system icons.

Making Your Tech "Fit" – Cords, Voice, Sound, and other hazards

Debra Carlson, Technical Advisor, CVC Computer Club, CO

Cords – Whether tripping or kicking (and disconnecting) them …

or getting the contents of your desktop lost in the shuffle …

cord / cable management is both a convenience and a safety issue.

Some basic principles:

- Label each Cord you plug into your outlets / surge devices.

Hint: When you get a new device, unplug the power cord from the device and attach the outlet end of the new device to this with a twist tie (or tape). Pull the old cord from the outlet end and it will fish your new cable to the surge strip or outlet. This doesn't work in a "mess of wires" but is good for many setups.

If you have many peripherals intermittently connected to your machine (a couple of cameras, a scanner, an external drive), consider a cable management "toy" for that as well.

Voice – You may have a microphone built into your webcam (or the webcam in your laptop), part of a headset, or a separate microphone. Settings are most often tested in an app that uses the microphone (e.g. Skype). External units may connect to your machine by audio jack, USB cable or Bluetooth (wireless). Two things are important:

1. Train transcription software completely if you use it. It will help minimize errors in the text.
2. If you are using this for dictation, assume there are going to be errors! Check for them … this will help avoid embarrassment over the messages you may send.

Sound – The biggest issues with speakers – USB, audio jack, Bluetooth, or Wi-Fi is accidental muting. This may happen on the speaker – especially if the on/off switch is a button rather than a knob control OR …

Your sound is muted (see the X next to, or on top of the megaphone)

If not muted, the volume may be too low.

Your YouTube or other video may need either unmuting or volume adjustment (YouTube shown).

You may need to adjust the speaker volume AND the volume of the audio/video – setting both of them to maximum can interfere with sound clarity.

Other hazards –

- UPS units and surge/power strips can be great, but many have on/off switches. Be sure your unit is not in a position where it can be easily kicked (or hit) – and shut off.
- All computing devices can overheat. Have circulation space — at least a couple inches each side on a tower, and if you have a laptop that lies flush on a desk, consider a cooling pad or other prop (I like bread cooling racks – right height and size).

Old program CDs make good drink coasters, wind chimes, or decorative hangings / picture frames. A couple ideas to make your desk area manageable and clear some clutter.

Book Review

Tim McQueen

Technically Wrong – sexist apps, biased algorithms and other threats of toxic tech.

Sara Wachter-Boettcher, Norton 2017 232 pp

There have been several analyses of the current state of computing technology reviewed in PC Update over the last year or two. The author of this book, which is now a couple of years old, is female and very aware of misogynist bias. She relates how poorly early revisions of Siri reacted to statements like 'Help, I've been raped'. There is also the issue of appropriate questions; she was once asked in an on-line form (to buy from a pharmacy) whether she had ever been sexually assaulted; the only options were yes or no, and there was no indication how the data might be used.

Snapchat mishandled a facial morphing feature. Google photos classified African Americans as gorillas. One suggestion to reduce problems like these is to increase diversity in technical company staff. Wachter-Boettcher thinks that this will fail, citing surveys that show the best indicator of employee suitability is similarity to existing staff.
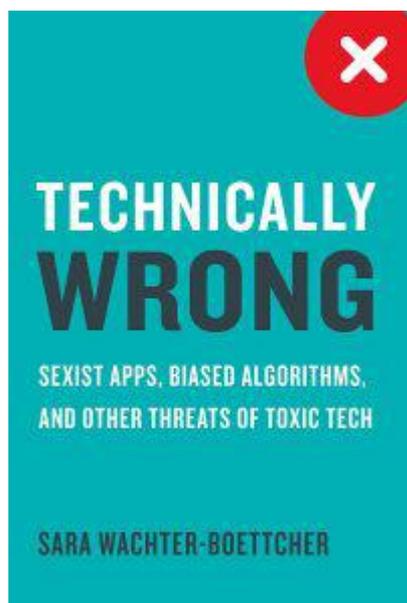
Facebook celebrated what a fantastic year someone had had with photos (complete with pictures of balloons and streamers) from the funeral of his daughter who had recently died of cancer. It was undoubtedly the major event in his year, but not something he wanted to be reminded of or to celebrate.

Wachter-Boettcher has difficulty with her surname in most applications; some don't accept hyphens and the length of the name can also be an issue.

In 1958, Michael Young coined the term "meritocracy" in his book, *The Rise of the Meritocracy*. Young used the term satirically to depict a United Kingdom ruled by a system that favoured intelligence and merit above all else. Wachter-Boettcher points out that it has been, and will continue to be, a badge of honour in Silicon Valley. She knows that we can only succeed in ridding technology of excesses and oversights if we look at digital tools as a result of a series of choices made by designers and technologists and try to improve the way those choices are made.

Technically wrong is a readable summary of the types of issues raised by recent developments in Artificial Intelligence.

East SIG Report November 2019

The November meeting opened with **George Skarbek** conducting his usual Q&A segment.

Q: In the last week Windows File Explorer has refused to open when I click its icon. This action has occurred after I loaded Clover, a File Explorer replacement. When I installed Clover it took an extremely long time to load so I decided to go back to using for File Explorer. After a search of the internet for solutions, I turned off File Explorer in Task manager then turned it back on again, but that had no effect. I then ran System File Checker but that didn't find any issues either. If I wasn't attending this meeting my next move would be to uninstall Clover.

(Trevor Hudson) Have you tried System Restore to set your PC back to when File Explorer was working?

(Answer) After I installed Clover I downloaded a number of large Windows Updates before I realised I had a problem. As my Internet connection is very slow (1.3 Mbps generally) I decided not to use System Restore unless other options to correct the problem fail.

A: System File Checker would have been my first suggestion. I'd then look at Task Manager and Resource Monitor at the bottom of the Task Manager window.
(A show of hands revealed only 10% of those attending use Task Manager or Resource Monitor. George then proceeded to describe its use to solve the problem of a slow computer.)

Right click on Windows Start menu and select Task Manager.
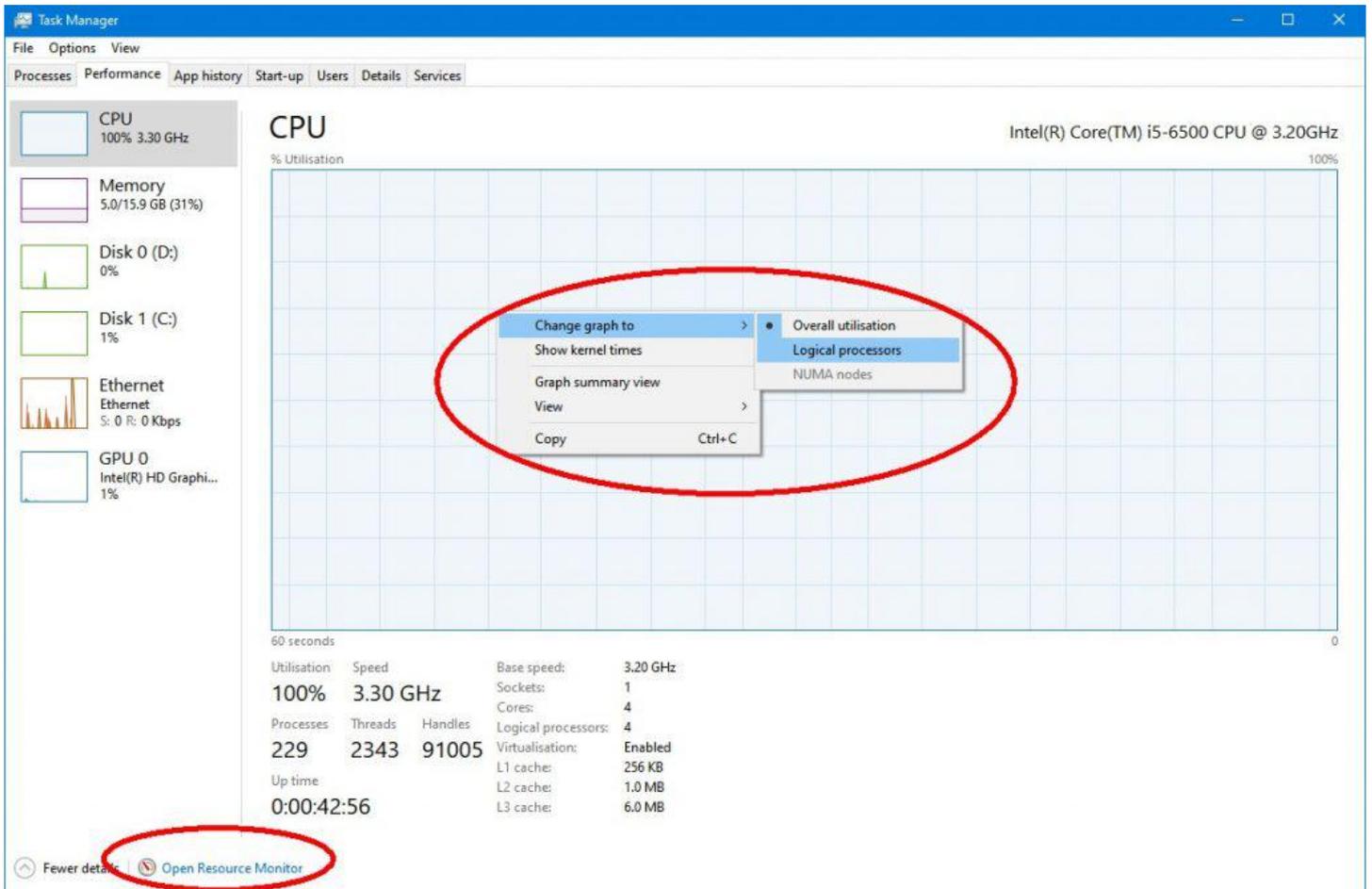
Figure 1 – Task Manager

If things are going slowly you need to determine whether it's caused by Windows itself or an application.

From *Task Manager* under the *Performance* tab right click on the graph of the CPU and do 2 things, select *Change graph to* then select *Logical Processors*. (Refer figure 1) The reason for doing this is to show all CPU cores. If you have multiply cores one may be running flat out and the others idling. The other area to look at here is to *Show Kernel Time*. Put simply the Kernel can be viewed as the core system of Windows. The dark blue in the graph is the kernel times. With no other applications running you can determine whether the slowdown is due to Windows or an application.

The *Resource Monitor* is located at the bottom of the *Task Manager* window (Figure 1) and will show what is eating up your CPU. Look at each of the 4 tabs, CPU, Memory, Disk and Network. If the CPU activity is high for a particular file right click on the file and select *terminate process*. If the graph in the Disk tab shows a high reading your disk may be constantly reading and writing which will slow your system down. Network is usually insignificant and not likely to cause a system slow down. These are the areas you start looking when things are slow. Once you've found the culprit, chase it back and uninstall it.

From the *Task Manager* window you should also look at *Startup* as is also an area that can slow a system down. Many of the programs in *startup* don't need to be running all the time, as they are using up your memory. Right click on any unwanted *Startup* items and select disable. This doesn't delete the program but just prevents it from running when the computer fires up.

You should also look at the Window log files. The logs can be found in Windows *Event Viewer*. To do this go to Control Panel ⬜ Administrative Tools ⬜ Event Viewer and look at the *Windows Logs* section. The two main areas to look at under Windows Logs are *Application* and *System*. (Refer figure 2) Scroll down the list to the right and look for any errors that could cause a slowdown. You can get more information for all errors but you will need a good knowledge to determine whether it's a problem or not when using this approach. If an error comes up repeatedly, look on the web for more information.
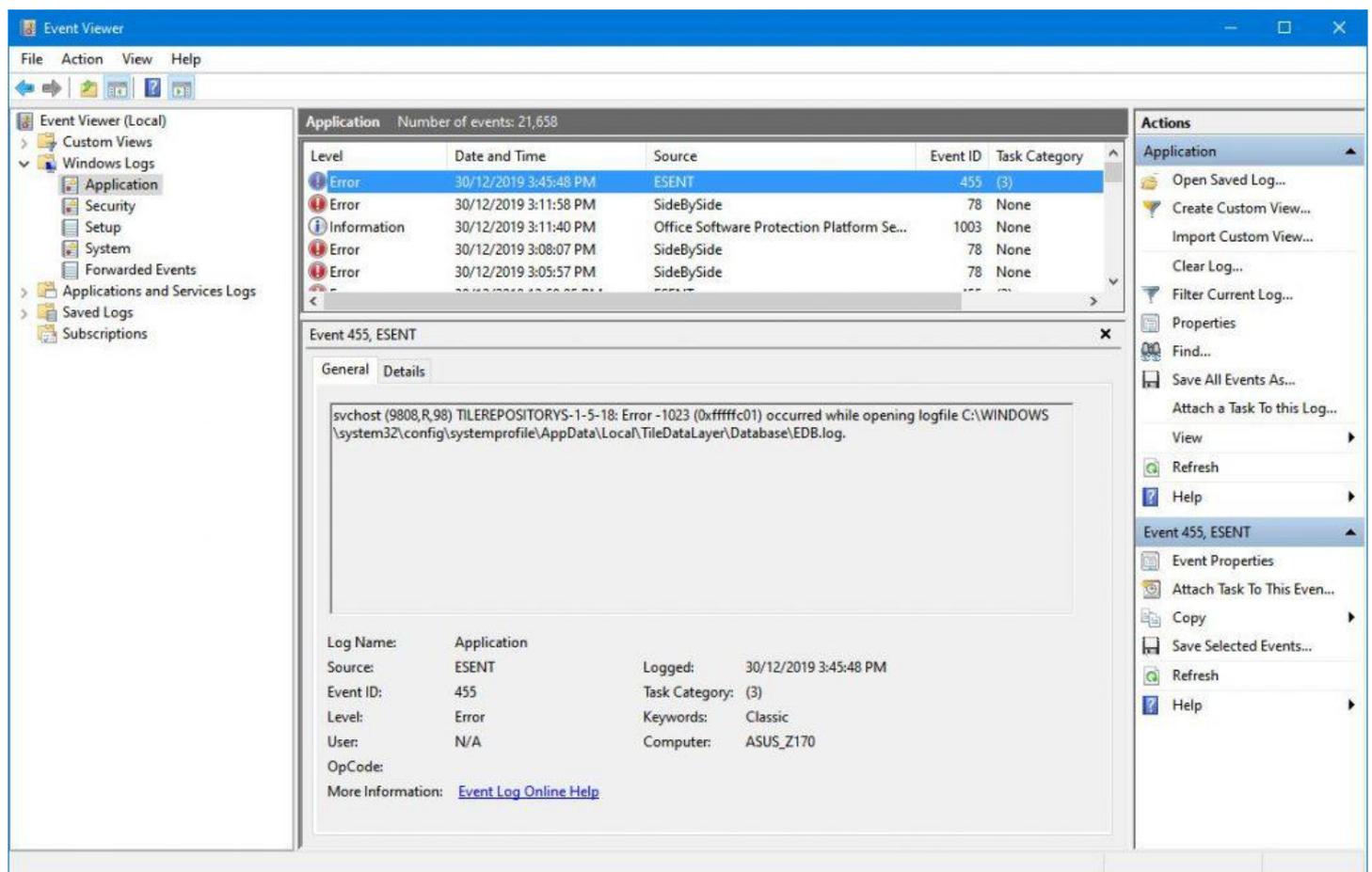

Figure 2 – Windows Event Viewer

Update: Initially when Clover was installed on the member's computer it took an extremely long time to

load, but now opens in an acceptable time. When the member clicks the File Explorer icon or uses the shortcut Windows key + E, File Explorer still does not open. Instead, Clover now opens and displays all the Quick Access folders similar to his File Explorer display. As Clover has a number of features that File Explorer doesn't have, such as tabbed windows, the member has decided to keep using Clover instead of File Explorer.

Q: How can I tell what version of Windows I'm running?

A: To determine the version of Windows you're running press the Windows key + R and type *winver* then press Enter.

Q: Sometimes my desktop PC will go weird and very sluggish. I've looked at Task Manager and the CPU shows 13%. Is 13% fairly normal?

A: If it's 13% then your disk I/O has gone crazy. Something is causing this problem and it's usually caused by your antivirus. It's likely some program is repeatedly scanning every single file on your system causing your PC to go slow.

Q: There's a maintenance setting you can turn on in Windows 10, is it worth turning on and what does it do?

A: I haven't turned on Windows 10 Automatic Maintenance setting so I can't comment.
[Author] According to the MicroSoft website, Automatic Maintenance is a feature that automatically runs daily scheduled maintenance tasks when you're not using your computer. It aims to keep your computer healthy and optimized by running specific tasks, such as disk optimization and defragmentation, system and apps updates, security and malware scans, diagnostics, and other tasks with the sole purpose of keeping your device healthy and running at its peak.

Q: I've recently got a new computer with a USB WiFi dongle. Whenever I power it up I have to unplug the dongle and plug it back in again for Windows to recognise it. Is there a setting I should be looking for so that the WiFi dongle is recognised when I power the computer up?

A: I have an elderly computer with a USB WiFi dongle and the WiFi always works when I fire up my computer. To my knowledge there's no setting for the WiFi to come on or off. (*Tech Ed: The WiFi dongle could also be tried in a different USB port, and this may produce a better result*)

Following Q&A, new Melbourne PC President, **David Stonier-Gibson** gave a short talk to members on his views for the future of MelbPC. The visit to East SIG was also to see how different SIGs function, to meet different members and to get their views on the future of MelbPC. David's found most SIG members are happy with the current operation of the club, but have a strong desire for it still to be around in 15 years' time. To that end they accept that there needs to be change for that to occur.

David spoke about his short time on the MelbPC committee being an advantage. This has enabled him to be free from the burdens of the past, which previous presidents George Skarbek and John Hall had to clean up. Thanks to George and John, the club is now in a good financial position and membership is now only slowly declining. The committee can now look more to the future and plan for MelbPC to be around in another 15 years' time.

David noted that fashionable things these days are not only PCs but making things, 3D printing, new technologies etc. To attract new members a new group called the Science Tech Group has been established which is aimed to suit younger people. This has resulted in younger people joining the Melbourne Computer Club (MelbPC) and a number of these younger members being elected to committee.

David then outlined a few of his ambitions for MelbPC but stressed these are only his thoughts at this

time. One idea that might be of interest to older members who don't like driving at night, is to hold daytime monthly meetings. It might be a different format to the current evening meeting being more social and could involve lunch. Other ideas are games events, half day courses or workshops such as getting started with 3D printing, Raspberry Pi etc., a photography contest where members meet at 10, are given an half hour briefing then leave to take their photos. They then return at 12 to judge each other's photos. A lot of things will need to be put in place before any of these ideas become fact.

An active question and answer session followed. One area that generated a number of questions was the need for a superior quality projector at Moorabbin. Members present felt a projector with a minimum resolution of 2k (2560 x 1440) was needed to show videos and more importantly for showing digital photographs. Some other questions related to; committee portfolio allocation (not yet decided), a question on membership (currently at 1,600 and now only declining slowly), how many active and inactive members we have (estimated only 300 read PCUpdate otherwise unknown), how can we attract younger mature age, say 50 to 60 year olds to join as members (currently targeting younger 20 year plus in Science Tech Group), encourage business to sponsor events or presentations (e.g. 3D printing), sponsorship of the magazine as it's a window to the club (only 12 members subscribe to a printed version of PCUpdate).

After a refreshment break, **Stewart Bedford gave an interesting presentation** titled "Useful Government YouTube videos and Mobile apps for Victorians". Stewart commenced by looking at some of the more unusual (read "useless") apps from the current 54 apps produced by the Victorian Government. These apps can be downloaded from the Victorian Government website "Mobile apps list" at https://www.vic.gov.au/mobile-apps-list. Most are available for both Android and iOS devices as shown in the landing page in figure 3.
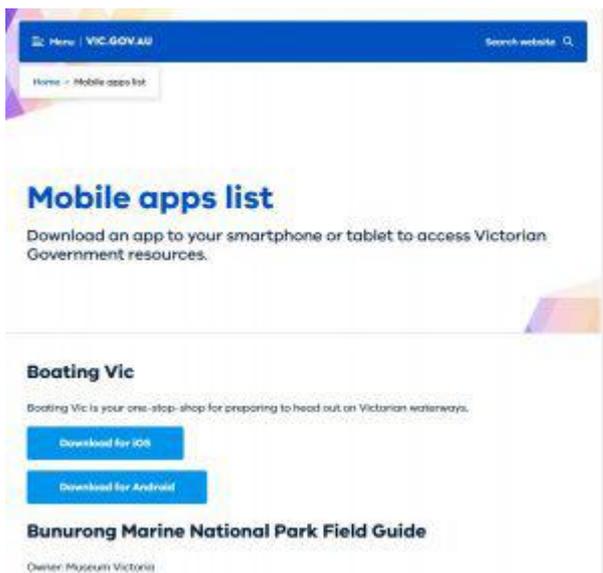
Figure 3 – Mobile apps list at https://www.vic.gov.au/mobile-apps-list

Before loading an app, Stewart recommends you first look at the reviews, the number of installs and when the app was last updated. Stewart found that most of the information offered in the Mobile apps list above is generally available from alternate websites. He queried whether the cost to produce some of these is a good use of resources. As apps can cost between $100 and $400k to produce, Stewart believes most are a complete waste of money, given many have recorded only a small number of downloads and that the same information is available elsewhere.

On a slightly more positive note is the mobile Myki app. The Myki app allows passengers to use their smart phone to tap on and off public transport, instead of using a plastic Myki card. To describe how mobile Myki works the short video "Adding a new myki" at https://www.youtube.com/watch?v=zHTgE2GgeHs was played. Stewart rates this app as a mess, as it's only half done and doesn't work all the time. It's only available on Android phones, you have to install Google Pay first, it can only be used with newer Android phones with NFC (Near Field Communication)

and you need VISA or MasterCard to pay Google Pay. Stewart believes the Opal System in Sydney is a more common sense approach. Passengers using the Opal System can use their credit card to touch on or off when travelling on public transport. Could it be that money goes on the Myki card in advance of any trip, compared to paying by credit card only when taking a trip?

A site Stewart does use a lot is my.gov.au. This is not an app but a website that you need to log into. It was included in the presentation as the website has now been made mobile friendly. When logged in, the site gives the appearance of an app and acts like an app. To give a brief outline of how to setup and use myGov, the YouTube video "New Look myGov" at https://www.youtube.com/watch?v=FV6hPRrHnOA was shown. Additional video tutorials to assist users are also available from the myGov YouTube channel at https://www.youtube.com/channel/UCPtuqZ_Izgm_jsjRE_OX-ww . Stewart was impressed with the range and information in these tutorials. He found them useful as they gave users a good insight to options available on the myGov website.

Services available through the myGov site include, Australian Job Search, Australian Taxation Office, Centrelink, Child Support, Dept. of Health, Veteran Affairs, Aged Care, Medicare, My Health Record, National Disability Scheme plus a few others. You can't sign into your myGov account through the website without user authorization. When you go to log onto myGov, an access code is sent to your smart phone by SMS. If using a mobile device you can also get an access code back through the myGov Access app. The myGov Access or Code Generator app creates codes which you enter when signing into your myGov account. These codes are used instead of SMS codes or secret questions. The code generator is available from the Google Play store. The myGov Access app can be downloaded at https://download.cnet.com/myGov-Access-code-creator/3000-20432_4-78117993.html).

Although Medicare and Centrelink can be accessed through the myGov site, a separate app is available for both. The Medicare app is called Express Plus Medicare mobile app and the Centrelink app called Express Plus Centrelink mobile app. Stewart uses both the Medicare and Centrelink apps and finds them useful and easy to use. He then outlined some of the many services available through these apps.

To conclude, Stewart reviewed the Victorian Public Transport app. Compared to overseas country's such as Singapore, he felt the app had a long way to go. Stewart then played the video "Getting started on public transport". This video can be found at https://www.youtube.com/watch?v=Q57hExF0YFE. The app gives real time metropolitan train, tram and bus information, network maps, train station information, location of Myki retail outlets, ordering a Myki card etc. but has had mixed reviews.

East SIG Report December 2019

Neil Muller

The final meeting for 2019 commenced with the now traditional Christmas BBQ, followed by a shortened meeting. Normal meetings will resume on the second Thursday in February 2020.

Following the Christmas BBQ, the December meeting commenced with Q&A conducted by **George Skarbek**.

Q: About half a dozen times recently my PC has frozen and displays a blue screen warning message "Your PC ran into a problem and needs to restart….". When I reboot and enter my password, everything works fine again. Can you suggest a solution?

A: You need to find out what is causing the need for a reboot. The best option is to use Windows Event Viewer. Go to Control Panel ☐ Administrative Tools ☐ Event Viewer. Look at the Windows Logs section. The two areas to look at under Windows Logs are ☐Applications then ☐System. (Refer Figure 1 below) Scroll down the list and look for any errors that occurred at the same date & time as the blue screen appeared. Click on the file that caused the error for more information and then try to figure out what is the root problem.
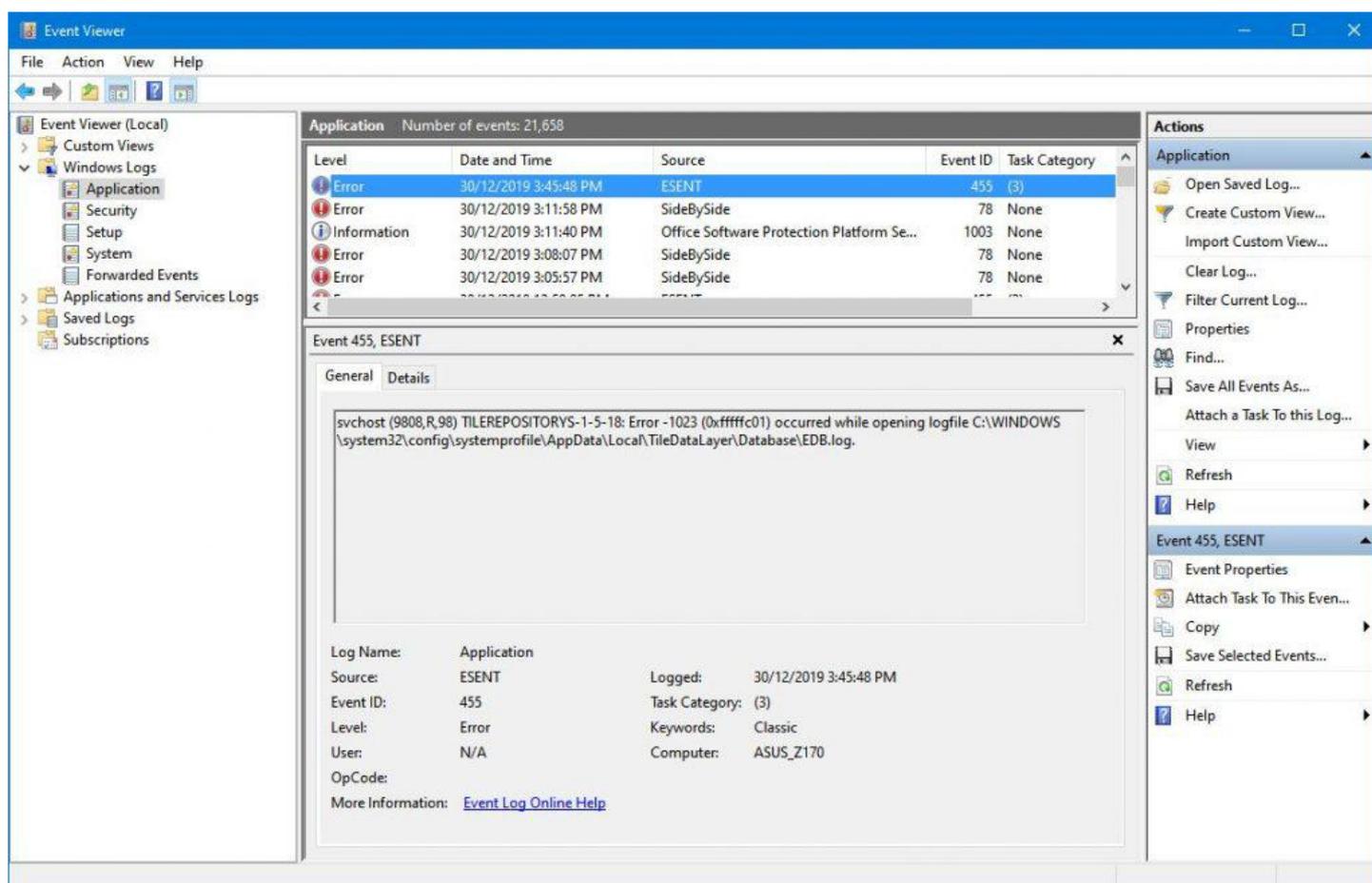

Figure 1 – Windows Event Viewer

Q: How far back does the Event Viewer go?

A: It depends on the size of your hard drive to a certain extent, but by default around 50 thousand events.

Q: I have a lot of USB devices plugged into my desktop PC and keep getting warning messages that I'm

overloading the system. It seems to happen with my keyboard but I swapped keyboards and the message keeps coming up. When I plug the keyboard into a different USB 2 slot its fine for a while, but eventually gives the same error message. Is there something generally wrong causing this and how do I re-establish the connection to the USBs when they stop working?

A: USB 2 slots have a very limited amount of power. If you plug a USB hub into one of those and connect a number of devices it's very easy to overload it. Even a small mechanical drive will struggle using a USB 2 slot, as the motor has to spin up the platters. USB 3's have a lot more power so use a USB 3 slot for devices that use a lot more power, such as a portable hard drive. A mouse and keyboard use very little power so they are fine using a USB 2 slot.

I recommend if you want to have multiple USB devices connected to your PC, you buy a card with 4 USB slots that fits into a PCIe socket on your motherboard.

For the second part of your question, rebooting the PC will not reset the USB's. You can go into Device Manager and uninstall the device then reboot your PC. If you don't know which USB device is causing the problem, uninstall them all then reboot your PC. Rebooting will reset all USB devices. A recent tool from MicroSoft called USBview allows you to browse all USB controllers and connected USB devices on your computer.

Q: I have a friend whose USB was not working. It turned out that one of the pins inside the USB plug was bent out of place.

A: Good point, thank you.

Prior to the next presentation meeting convenor Paul Woolard thanked East SIG committee members Dave Botherway, Frank Maher, Ian Dewhurst, John Swale, Stuart Bedford and Trevor Hudson for their help running the SIG. Paul gave particular thanks to Dave, Stuart and Trevor for the many presentations they gave during the year. Thanks were also given to George Skarbek who does Q&A each month and for his numerous presentations, to Neil Muller for the meeting reports that are published in PCUpdate and on the East SIG website and Gunther for preparing tea and coffee during our meeting break. Dave Botherway then thanked Paul for leading the team.

Following Paul's thanks, **George Skarbek** gave a very informative talk on gliding. He commencing with a brief history of gliding and then spoke of his own involvement in the sport as a pilot and instructor. An excellent video prepared by George (you would expect no less from George) on gliding, with beautiful narration by Kat Skarbek was shown. George expressed his amazement that the video, which was produced 6 years ago, has received over 100,000 views on YouTube. The video titled "Winch launching at Mount Beauty" (YouTube lists it as "Winch launching **in** Mount Beauty") can be viewed on YouTube at https://www.youtube.com/watch?v=SE5J5w6DYeI. Given the interest in this talk a long question and answer session followed.

Winch launch - YouTube
https://www.youtube.com › watch ▾

Apr 26, 2013 - Uploaded by George Skarbek
Winch launching in Mt Beauty, Victoria, Australia. ... **Winch launch**. George Skarbek. Loading... Unsubscribe ...

▶ 5:44

Northern Suburbs Linux SIG Report January 2020

David Hatton

The first meeting for the year was opened with the now traditional Linux News which featured a video reviewing the rise of Open Source software in the computing landscape.

The video featured comments by several "heavy hitters" of the Open Source world, for example Nat Freidman (CEO GitHub), Chris Wright (CEO Red Hat), and Jim Zemlin (Executive Officer Linux Foundation).

A brief history of open source software development was outlined, starting with the late 1990s closed source proprietary software. The achievements of the Free Software movement originating with Richard Stallman at the MIT AI Lab and leading to Linux Torvalds' Linux Operating system challenged the proprietary software development model, and led to the open source movement of today.

In 2008, Google released the first versions of Android, an operating system for mobile devices built on the Linux Kernel. Since then, Open Source software development has become the "new normal", where collaboration and sharing of information are increasingly adopted by those who need to solve today's more complex problems.

Currently, funds for open source software development and maintenance are usually raised by software support subscriptions, the sale of useful add-ons to free core software, and Linux Foundation support.

Following on from Linux News, David Hatton gave a presentation in the "Random Bytes" series. Two topics were introduced and discussed, namely the use of swap partitions and swap files and the use of the gpg command line utility to quickly encrypt a file with a passphrase.

It is considered essential for a Linux installation to include the creation of either a swap partition or a swap file to make the operation of the linux kernel more robust.

Different Linux distributions have different default arrangements for creating a swap facility – for example Debian defaults to a swap partition and Linux Mint defaults to a swap file. These defaults are set up when the user installing the distribution simply accepts the predefined setup.

David demonstrated the use of the 'swapon' command to confirm the type of swap facility in use, and the use of the 'df' command to check the configuration of memory.

Assuming that the swap space is being heavily used, generally indicated by a significant slowdown of the system, the creation of an extra swap file was outlined. This is the most convenient and quick method to provide extra swap space, which involved the use of the 'dd' command to create a suitable swap file. Once a swap file is created, it needs to be set up for use with the 'mkswap' command, and then made visible to the system with the 'swapon' command. Finally, there needs to be a line added to the 'fstab' file to make the new setup permanent.

A refreshment break followed, which extended to fill available time as attendees caught up with each other and the events of the past two months, and the meeting finished promptly at 9.30 pm.

Links:
https://www.cnbc.com/2019/12/14/how-open-source-software-became-the-new-industry-standard.html

[Yammer Highlights January 2020](#)

Dennis Parsons

Computer Help

With the recent official demise of Windows 7 I decided to conduct another of my "quick and dirty" Yammer polls to discover the state of play for members – had they already embraced the inevitable and moved to Windows 10, abandoned Windows entirely, or were they clinging desperately to Windows 7?

Somewhat surprisingly only 10% responded that they were still using Windows 7 with no intention of changing, 68% had switched to Windows 10, 14% indicated they had switched to something else or had ceased some time ago, and one member bravely admitted he still used Windows XP. He did qualify this by saying he only used it to run accounting software and never took it online, making it about as safe as possible to use.

Why the high uptake of Windows 10? I suspect the free upgrade path that Microsoft offered has played a large part, and as this is still available as far as I know it's not too late to upgrade (Ed: It definitely is still available). Continuing to use Windows 7 isn't really a viable option as you **will** be left behind as software such as browsers and anti-virus programs become unsupported on Windows 7, not to mention the lack of any future security updates. Time to bite the bullet and update.

https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=513814242713600

Security, Scams and Phishing

Jan bought herself a new laptop that came with a trial version of the McAfee anti-virus program which she wasn't interested in continuing to use, so was wondering what her options were for a free anti-virus program – installing the program she was using on her old laptop, changing to another vendor or using Windows Defender that comes with Windows 10?

There are plenty of options to choose from, some good, some not so much, but the consensus seems to be that while it's not a stellar performer, Windows Defender is "good enough" for most users. It was also suggested to run regular scans with the free version of Malwarebytes.

Being a newcomer to Windows 10, Jan wasn't quite sure how to reinstate Windows Defender – she discovered Windows wouldn't run Defender while McAfee was also running, so after being assured the solution was to simply uninstall McAfee she was happy to confirm that Defender automatically resumed.

https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=455654205964288

https://www.yammer.com/melbpc.org.au/#/Threads/show?threadId=498747096293376

FEBRUARY RAFFLE 2020
TICKETS: 1 = $2, 3 = $5

MELB PC USER GROUP
"Members helping Members"

Tickets are available for purchase at the Monthly Meeting in Moorabbin.
The draw will be during the meeting and winners must be present to collect, unless an arrangement is made.

Beginner Kit for Arduino
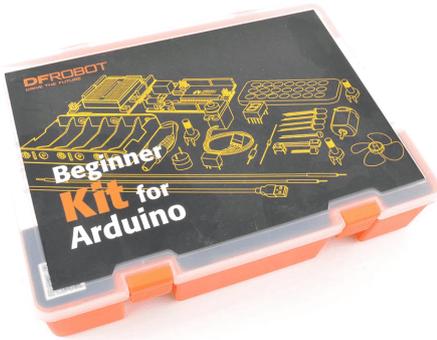
- For those who are interested in learning about Arduino and electronics.
- Starting from basic LED control to more advanced environmental sensing, monitoring and actuators.
- This kit will guide you through the world of the sensing, controlling the physical world through sensors and arduino microcontroller via carefully designed project.
- Comes with part list and instructions.

HD 1080P Mini Hidden SPY Camera

- Mini size, suitable for all occasions such as having lessons, meeting, taking part in the concert, and interviewing, etc.
- Lightweight and easy to carry, SanDisk Ultra 32GB memory card included.
- You can record while it's charging.

Wearable Sports Fan

- Hand free cooling fan with powerful airflow.
- Flexible arms allow you to choose the best wind direction .
- Has 3 adjustable speed level: low, medium and high.
- One full charge can work for 2-6 hours.

February Calendar

SIG & Other Meetings — Feb-2020

Latest version of this Calendar is at: https://www.melbpc.org.au/ (see Quick Links)   This version is: V2–updated–29-jan-2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Legend SIG meeting at Melb PC HQ, Moorabbin. **Non-Moorabbin meeting.** ~~Cancelled Meeting~~ Changed Meeting To be confirmed	**Changes** Please advise changes to: calendar-admin@melbpc.org.au	**Other SIG (Special Interest Group) information:** https://www.melbpc.org.au/sigs/about/ **Recent Changes:** https://www.melbpc.org.au/sigs/about/recent-changes/			**Have A Question** **Post it on Yammer** Yammer: http://yammer.com/melbpc.org.au/	**1** **Coder Dojo** *Moorabbin* *(Borret t Room)* *9am-11am* *https://melcc.org.au/coderdojo*
2 **Science & Tech Projects Group** *Moorabbin* *1pm - 5pm*	**3**	**4**	**5** **North East Genealogy SIG** *80 Hawdon Street Heidelberg* *10am - 12noon* **MONTHLY MEETING** *Melb PC HQ, Moorabbin* *7pm – 9:30pm* **then Supper (WAFFLE)** *at Fong's 9:35pm*	**6** **Sunbury Daytime SIG** *New Users* *9:30am - 12noon*	**7** **Essendon SIG** *Main meeting* *Avondale Heights* *9:30am - 12noon* **Multimedia Home Entertainment SIG** *Mount Waverley* *10am - 12noon*	**8** Microcontroller Workshop SIG *Moorabbin* *12noon - 5pm* **Raspberry Pi – Moorabbin SIG** *2pm - 4pm*
9 **East Workshop SIG** *Mount Waverley* *10am – 12noon*	**10** **Access (database) and Excel SIG** *Moorabbin* *6:30pm – 8:30pm* **Video Production Group** *~~Moorabbin~~* *~~7pm - 9:30pm~~* *SIG at Moorabbin cancelled (no further meetings), BUT replaced by new SIG – see entry for 28-Feb in this calendar.*	**11** **Investment Tools - WASINT SIG** *Moorabbin* *10:30am - 12:30pm*	**12** **Video Production – Sony SIG** *Moorabbin* *10am - 12noon* **North East Daytime & Photography SIG** *Heidelberg* *10am - 12noon* Communications SIG *Moorabbin* *7pm – 9:30pm* Microcontroller SIG *Moorabbin* *7pm – 9:30pm*	**13** **Sunbury Daytime SIG** *Advanced* *9:30am - 12noon* **East SIG** *Blackburn South* *7:30pm - 9:30pm*	**14** **Essendon SIG** *Open Forum* *Avondale Heights* *9:30am - 12noon* **Hardware SIG** *Mount Waverley* *10am - 12noon* **Casey SIG** *Beaconsfield* *1pm - 3:30pm*	**15** **Coder Dojo** *Moorabbin* *(Borrett Room)* *9am-11am* *https://melcc.org.au/coderdojo* **Windows Plus SIG** *Moorabbin* *10am - 12noon*
16 **Beginners East (BEAST) SIG** *Vermont South* *10am – 12noon* **MACE (Atari Computers) SIG** *Moorabbin* *10am - 2pm* **Genealogy East SIG** *Vermont South* *12:30pm - 2:30pm* **Science & Tech Projects Group** *Moorabbin* *1pm - 5pm*	**17** **Mornington Peninsula SIG** *General inc Q&A* *Mornington* *9:30am - 12noon* *Family History* *Mornington* *1:30pm - 4:30pm* **Northern Suburbs Linux SIG** *Watsonia* *7:30pm – 9:30pm*	**18** ~~Everything Apple SIG~~ ~~*Moorabbin*~~ *SIG has ceased – no more meetings* **Melb PC Committee** *Moorabbin* *7pm*	**19** **North East Android SIG** *Heidelberg* *10am – 12noon*	**20** **Sunbury Daytime SIG** *Main Meeting* *9:30am - 12noon* **Bayside SIG** *Brighton* *10am - 12noon*	**21** **Essendon SIG** *Various topics.* *Avondale Heights* *9:30am - 12noon* **Digital Images SIG** *Including Photoshop* *Mount Waverley* *10am - 12noon* **PC Update – Articles Deadline**	**22** **Intro to 3D printing workshop** *(one-off – Feb only)* *Moorabbin* *10am-3pm* *https://melcc.org.au/introduction-to-3d-printing-2002* **Microcontroller Workshop SIG** *Moorabbin* *12noon - 5pm*
23 **Website Design SIG** *Tutorials* *Moorabbin* *2pm - 4pm* — *Troubleshooting* *Moorabbin* *4pm - 6pm*	**24**	**25**	**26** Video Production – Pinnacle SIG *Moorabbin* *10:00am – 12:30pm* **Mornington Peninsula SIG** *Family History – Advanced DNA (LAST Wed of month)* *Mornington* *2pm - 4pm* **PC Update – Reports deadline**	**27** **Sunbury Daytime SIG** *Maintenance & Linux (Fourth & fifth Thu of month)* *9:30am - 12noon*	**28** **Video Production - Mt Waverley SIG** *Mount Waverley* *10am - 12noon* *NEW group.* ~~**Raspberry Pi - Mt Waverley SIG**~~ ~~*10am - 12noon*~~ *SIG has ceased – no more meetings*	**29** **Coder Dojo** *Moorabbin* *(Borrett Room)* *9am-11am* *https://melcc.org.au/coderdojo*